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ABSTRACT

This report describes the process by which an integrated evaluation, planning, and budgeting system was developed and refined for use in Georgia's postsecondary vocational education system. An introductory section reviews the factors responsible for the lack of a systematic process in Georgia and outlines the objectives of the system development effort. The second section reviews the procedures followed by the system developers. Presented in chronological order, these procedures included: identifying pilot schools; presenting the project plan to the State Board for Postsecondary Vocational Education; orienting the pilot school directors; establishing definitions and standards for preliminary assessments; creating criteria, standards, and procedures to be used in assessing new and expanded programs; and critiquing the project's own progress at midpoint. Problems encountered along the way are discussed and the outcomes of the activities undertaken are identified. The third section describes the evaluation, planning, and budgeting model as it was recommended to the state board. Definitions, forms, and timelines to be used when applying the model are included. The fourth section presents recommendations to the state board concerning implementation of the system. Appendixes make up over half the document and consist primarily of forms used during the system development process. (PGD)

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EVALUATION REPORT: EVALUATION, PLANNING & BUDGETING MODEL

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August 1985

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EVALUATION REPORT: EVALUATION, PLANNING & BUDGETING MODEL
POSTSECONDARY VOCATIONAL EDUCATION

INTRODUCTION

The primary mission of postsecondary and adult vocational education in Georgia is the provision of programs and services which develop those job skills demanded by business and industry and needed by its citizens to obtain, maintain and advance in gainful, satisfying employment. In fulfilling this mission, the postsecondary and adult program becomes a major contributor to the economic health and well-being of the State and its citizens.

The design and continued delivery of currently relevant job training programs and services is predicated on the establishment and utilization of a comprehensive evaluation, planning and budgeting system at the local and state levels. According to the staff of the State Board for Postsecondary Vocational Education, evaluation, planning and budgeting have traditionally been viewed as separate but somewhat related functions in the operation of postsecondary vocational-technical schools. While most agree that these functions should be closely integrated, a system for accomplishing this does not exist at the present time in Georgia. The staff attributes this lack of a systematic process to the following:

1. Short-Range Viewpoint — Planning has been viewed primarily as a short-range function with emphasis on the upcoming year. Typically, local institutions look ahead 1-2 years while some

state-level planning considers needs up to 5 years in the future. However, little serious effort is devoted to needs that extend beyond the next fiscal year.

2. Planning for Compliance Purposes -- Improvements or expansions of existing vocational programs or the addition of new programs which result in additional costs has not been accomplished through a systematic process. The local institution submits a section of their local plan as an improvement request. This may contain such new items as capital expansion, building modification, personnel, or equipment. Since little justification is required, the State Office seldom seriously considers this "want list" in developing their list of priorities for the next year's improvement budget request.

3. Lack of Assessment Data -- Each institution is required to respond to the 5-year State evaluation through the development of a program improvement plan. Also, if any institution fails to maintain State requirements in terms of outcomes, a written response is submitted. The data on substandard programs is not accumulated over time to determine patterns nor is such data adequately utilized in budget planning at the State level. In effect, a snapshot is taken each year of each institution's outcomes, but is not effectively compared to the previous year's results.

4. Add-On Attitude -- The emphasis has been on expanding programs and facilities while maintaining existing programs. Many vocational programs have now been in operation for 15-20 years without a major assessment for continued need or without a significant maodification of program, purpose, and content. The acceleration of the impact

of technology is affecting all programs and a continuous updating is essential. Certainly such updating is taking place at the institutional level and programs are closed each year. However, a process needs to be implemented that carefully examines use of existing resources prior to committing new funds. (Working paper, State Board for Postsecondary Vocational Education staff)

Objectives of Project

With these shortcomings existing throughout the state-wide network of postsecondary vocational schools, the following purposes were identified by the contracting agencies which included the Office of Vocational Education, Georgia State Department of Education and the State Board for Postsecondary Vocational Education:

1. Further refine the concept model
2. Develop model specifications
3. Develop specific criteria for assessment of vocational programs
4. Develop assessment procedures for both state and local level
5. Develop specifications and procedures for designing program improvement plans
6. Develop a comprehensive procedures manual
7. Field-test the system in 5-7 sites
8. Incorporate improvements as indicated by field-test results

The contract period was identified as being December 15, 1984 through June 30, 1985 with final invoices and products to be presented no later than August 30, 1985. The project monitors were identified as Charles Horton from the Office of Vocational Education and John Lloyd from the State Board for Postsecondary Vocational Education.

REVIEW OF PROCEDURES FOLLOWED

The following section describes the procedures followed in accomplishing the objectives of the contract. These are presented in chronological order in order for the reader to obtain a more realistic perspective of the project's scope and sequence. Problems are identified as they were encountered throughout the contract period. Major recommendations for change and followup activities are included in the final section of this report.

Identification of Pilot Schools

The project director met with the project monitors during the first week of December, 1984 for the purpose of identifying the pilot schools to be invited to participate in the project and to review the specific objectives of the contract.

It was felt that every effort should be made to identify schools which represented different patterns of governance, different geographical areas of the state, and different sizes. Consideration was also given to those schools which had been identified as being eligible for planning grants during the following fiscal year. Using those criteria, six schools were initially identified by the project monitors including:

Brunswick Junior College

Macon Area Vocational-Technical School

North or South Georgia Vocational-Technical School

Savannah Area Vocational-Technical School

Griffin-Spaulding Area Vocational-Technical School

Troup Area Vocational-Technical School

Because of prior commitments to other efforts, both North and South Georgia Vocational-Technical School declined to participate in the pilot effort. The directors of the other five schools identified above, however, readily agreed to participate in the project.

Preliminary Presentation to State Board, Postsecondary Vocational Education

At the request of the staff of the State Board for Postsecondary Vocational Education, a preliminary presentation was made to the State Board. The primary purpose of the presentation was to outline an overview of the project activities and to solicit the Board members' input as they might deem appropriate. In that presentation, a differentiation was identified between "strategic planning" and "operational planning" and a preliminary model depicting a suggested sequence of activity at both the state and local levels for strategic and operational planning was reviewed. Refer to Appendix A for a summary of that presentation.

Orientation Meeting, Pilot School Directors

Prior to the initial orientation meeting held with the pilot school directors, a review and synthesis was made of the current state of the art in evaluation, planning and budgeting systems, especially those which had been designed expressly for postsecondary vocational-technical schools throughout the United States. A review was also made of models which are currently used in other institutions of education as well as in business and industry. Particular note was made of system components, criteria,

and standards along with management procedures identified as being requisite for the successful implementation of the systems studied.

Upon completing this preliminary review of the literature, an orientation meeting was called for January 11, 1985 with the project monitors, the pilot school directors and other invited guests including the Executive Director of the State Board for Postsecondary Vocational Education, the Executive Director of the State Advisory Council for Vocational Education, and members of the State Advisory Council as identified by the Executive Director.

One of the major objectives of that orientation meeting was to identify the strengths and weaknesses of the current "system" for evaluation and planning. This was done to help insure that the proposed model capitalized on current strengths as might be identified, while concurrently eliminating the perceived weaknesses of the current system.

The major strengths of the current system as perceived by the group included:

..."It is relatively simple.

..."It incorporates a variety of input from a number of sources."

..."It can result in increased staff."

..."Schools are familiar with the process. It is not new."

..."It is better than nothing."

..."It is based on a state-wide master plan."

..."Doesn't take much time to develop."

..."Provides a fairly objective funding basis."

..."Includes a definitive budget page."

While it was suggested that these strengths be maintained in the proposed model to be developed, the group identified the following as being the primary weaknesses which should be avoided:

..."Lack of adequate involvement with the business community"

..."Inflexibility"

..."No real system for targeting resources"

..."Constant change in rules and regulations with no flexibility at the local level"

..."Process has focused more on expansion than on the re-direction of programs"

..."Not really a plan"

..."Lack of distinction between local application, local plan, and program improvement"

..."Is a fragmented process"

With these characteristics clearly in mind, the discussion focused on the need for the development of an evaluation, planning and budgeting model which would incorporate objective criteria and standards, suggested management procedures for implementing the system at the local level, suggested time-lines for both state and local use, and wide involvement of the local school staff as well as the business community.

The attention of the group was first directed to the objective identification of criteria which could be used in the assessment of on-going programs. From the study of the literature, twenty-five possible criteria items were identified along with suggested data sources. Each item was typed on a separate card and a set of 25 cards was given to each participant in the group. Without discussion, each person classified each item into one of three categories: (1) major importance, (2) moderate importance, (3) little or no importance.

No restriction was placed on the number of items which could be placed into any one category. Additional cards were provided each participant whereon he/she could record any other criterion item thought to be appropriate.

At the end of the first round, only one additional item had been identified, that being "unmet training need". Of the 25 original items, 21 of them had been placed in category I by one or more participants. The four items not included by Category I by any single participant were eliminated from the pile of cards.

Before beginning the second round, a standard of six was established by the group as beginning the necessary number of "votes" needed for a criterion to remain in the pile for consideration in the third round of voting. The participants then classified the 21 remaining cards into the three categories of importance. Upon completion of round two, thirteen items were identified in Category I by at least six of the participants.

Prior to beginning the third round of voting, the participants were encouraged to discuss the criteria and their rationale for including the items in Category I. Likewise, they were encouraged to argue for the elimination of criteria from Category I. Following discussion, a standard of eight was then established as being necessary to remain as a major criterion of importance in asssessing the effectiveness of on-going programs upon the completion of round three. Upon completion of the third and final round of voting, twelve criteria had been identified as being of "major importance" by eight or more of the participants. These twelve included:

"Trend in quarterly enrollment per instructor for last 3 years"

"Average completion rate per instructor for last 3 years"

"Average placement rate in field or related field for which trained per instructor for last 3 years."

"Employer satisfaction with quality of graduates' work."

"Average percentage of completers passing state licensing exam for last 3 years."

"Average percentage of completers demonstrating acceptable competency levels as measured by standard proficiency measures."

"Capacity and condition of facility."

"Participation and support of business/industry representatives in program planning, operation and evaluation."

"Availability and effectiveness of placement service to program enrollees and graduates."

"Availability and utilization of current training materials in program."

"Unmet training needs."

(Refer to Appendix B for a complete listing of all criteria proposed for the assessment of program effectiveness.)

Concern was expressed that the assessment would become difficult to administer at the local level if all 12 criteria were to be used to assess program effectiveness on an annual basis. At this point, the suggestion was made by the Executive Director of the State Board that consideration be given to identifying criteria for a preliminary assessment of all programs and a secondary assessment of those programs which fail to meet the standards established for that first assessment of all programs.

The discussion which followed subsequently identified three criteria as being critical to program success, namely "enrollment", "completion" and "placement". It was felt that other criteria could be reflected within other criteria, e.g., unmet training need would ultimately be reflected in a program's placement rate. Program <u>enrollment</u>, <u>completion</u>, and <u>placement</u> for the previous <u>three years</u> were thus established as the "yardsticks" for determining effec-

tiveness in the preliminary assessment process.

Six of the twelve criteria placed in Category I were then identified as being of greatest importance in the secondary assessment process. This assessment would be conducted for all programs failing to meet the standards which would be established for the first three criteria. The criteria included in the secondary assessment process included: assessment of facilities, equipment, instructional materials, business support and participation, employer evaluation and student evaluation. A seventh criterion, teacher qualification, was discussed at length with consideration given to such data elements as annual performance appraisal reports, student evaluations, and certification. This criterion was ultimately eliminated from the secondary assessment process as it was felt by the group that it would be adequately addressed in the school's personnel management and staff development program. Too, concern was expressed that personnel problems might arise if such data were publicly displayed.

The group's attention was then turned to the identification of criteria which should be used to justify program initiation or expansion. Since the need for objectivity had been identified as being of critical importance in the design of the proposed model, two alternatives were presented as viable options for the justification of program need and the establishment of priorities. The first alternative is known as the "essential characteristic method" wherein essential criteria for providing such justification are identified within the model. If a proposed program is found to reflect all of the essential criteria, it is identified as a "winner" and becomes eligible for state funding.

The second alternative is referred to as the "weighted factor index method". Like the previous method, essential criteria are identified as being necessary to justify program expansion or initiation. Weights are then assigned to each criterion from which a total weight or profile can be calculated for each proposed program. This method offers the advantages of providing relative weights for each proposed program, and through the use of required minimums, programs can be objectively eliminated from consideration as well as objectively identified as a priority for funding purposes.

Much the same method was followed by the group in identifying those criteria considered to be of major importance in justifying the need for new programs or for program expansion. A total of thirty possible criteria had been previously identified by the project director with each item placed on a single card. Thirty cards were given to each participant to categorize into one of three categories. Additional cards were provided to each participant for the identification of other criteria. Standards were established for each of the three rounds of votes. Discussion was not allowed among the group until after the second round of votes had been taken. Six criteria were identified by the group as the outcome of the third vote, including: trends in demand, unmet need within 50 mile radius of school, statewide demand as evidenced by AEC Study, State Plan or some other source, estimated startup cost, estimated operating cost, and estimated cost per placement. Refer to Appendix C for a complete listing of all 30 criteria.

The orientation meeting concluded with a preliminary review of proposed timelines, a brief critique of the conceptual model as proposed by the State Board staff, and a discussion of the relationship of this project to other project efforts currently underway in the State Board office.

Establishment of Preliminary Definitions and Standards

Based on the input provided by the pilot school directors, the project monitors and representatives from the State Advisory Council in attendance at the orientation meeting, the project director then developed and distributed the following for review by those same individuals:

1. Identification of criteria for the preliminary and secondary assessments including proposed definitions.

2. Suggested forms for use in compiling those data elements.

3. A summary sheet for identifying the outcomes of that assessment.

4. Proposed standards for determining acceptability and categorization of programs based on assessment outcomes.

5. Draft copies of assessment forms proposed for the secondary assessment process along with suggested procedures for data collection

6. A proposed weighted index for justifying new and/or expanded programs.

Refer to Appendix E for a copy of this complete package as distributed.

Prior to the next meeting set for nine days later, the pilot school directors were asked to complete the preliminary assessment process of all programs in their school using the proposed definitions, forms and procedures. Too, they were asked to critique the proposed standards as well as the forms suggested for the secondary assessment process.

The definitions for the three critical criteria, enrollment, completion and placement were subsequently critiqued and refined throughout the next five month period. The ultimate outcome of the group's deliberations was the identification of two major aspects to each of the three criteria. These included:

1. Enrollment

   a. Three-year average enrollment compared to standard

   b. Three-year trend in enrollment compared to standard

2. Completion

   a. Three-year average completion compared to standard

   b. Three-year trend in completion compared to standard

3. Placement

   a. Three-year average placement compared to standard

   b. Three-year trend in placement compared to standard

PROBLEMS ENCOUNTERED:

Numerous problems were encountered in attempting to establish realistic definitions for the three criteria and to identify an accurate data base from which these items could be collected. Among the problems identified were the following:

1. Classification of student reasons for program withdrawal appears to be subjective. Little consistency was found among the pilot schools in interpreting the MIS definitions of withdrawal classifications.

2. Availability for employment appeared to be subjective in its interpretation in that the individual instructor determined the student's availability based on his/her perceived skill level. E.g., if the instructor perceived the student to be lacking in the necessary skills to obtain employment, he/she was subsequently classified as being "unavailable for employment".

3. Considerable difference of interpretation was found in the term "full-time" vs "part-time" enrollment. This difference varied from "weekly enrollment of at least 30 hours" to "weekly enrollment of more than 10 hours".

4. No consistency was found in applying the definition of "full-time" and "part-time" between "day" enrollment and "evening" enrollment.

5. No consistency was found in the definition of the term "completer". One classification in particular, "completion of administrative requirements" could not be interpreted by either project monitor nor by any of the pilot school directors. If the student completed "less than 50%", the reasons most often given for withdrawal were "indifference" or "personal" which at first look, tended to focus the problem on the student rather than the program.

6. The calculation of the number of completers "available for employment" provided the basis for determining the percentage of positive placements. Thus, if students were subjectively eliminated from the total number available for employment on the basis of the instructor's perception of student competency level, the program's subsequent placement rate could be considerably enhanced.

7. Some of the pilot school directors criticized the accuracy of the MIS data in relation to the original data furnished by the schools, whereas other directors felt that the data were accurate and that where errors were made, the MIS staff were working with the school to make the corrections identified.

8. In many instances, a low placement rate seemed to correspond with a high completion rate, whereas a low completion rate appeared to correspond with a high placement rate. The accuracy of this relationship appeared to be questionable based on the inconsistencies in the interpretations of given definitions.

Each of the pilot schools completed the field-test of the preliminary and secondary assessment using the defintions and forms included in Appendix F. It should be noted that this pilot effort incorporated the use of the three criteria of enrollment by taxonomy for past three years, total completion by taxonomy for past three years, and total placement by taxonomy for past three years. The identification of the six indicators as described on the previous page was not completed until after the pilot effort was completed. Consequently, all programs classified as "C" and for which secondary assessments were conducted were those which were identified through the use of the limited criteria.

Upon completing the secondary assessment of those ongoing programs classified in the "C" Category, a review was made of the forms and procedures used in that process. One particular finding was noted in that the assessment of the instructional materials in each of the "C" programs proved to be of little help in attempting to diagnose causes of a given program's deficiencies. In almost every instance, the materials were found to be more than adequate and appropriate for the program. Because of its failure to provide an indication of ineffectiveness, that assessment was subsequently combined with the assessment of equipment into a single instrument and single criterion.

In reviewing the comments and recommendations offered by the users of the forms during the assessment process, the recommendation was frequently made to modify the ratings on the equipment and facilities instruments to a Likert scale rather than a "Yes"/"No" response. Those modifications were made and are reflected in the model subsequently recommended as an outgrowth of the project effort.

It should be noted that in conducting the secondary assessment, those indicators which provided the strongest relationship of possible cause of deficiency or were clues in themselves of problems were "student evaluation", "evidence of business support and involvement" and "employer evaluation". Again, in almost every instance, there appeared to be a direct correlation between the "C" classification and low ratings on one or more of these criteria.

Establishment of Criteria, Standards, Procedures for New/Expanded Programs

While the assessment of on-going programs was being conducted in the pilot schools, the team's attention was turned to the preliminary development

of criteria, standards and procedures for justifying requests for new and/or expanded programs.

A preliminary decision was made to adopt the weighted factor index model as the method which would be used to objectively determine program justification and the establishment of priorities. It was recognized, however, that little of the data called for in the use of the six identified criteria were available at the state and local level, i.e. unmet need within a 50 mile radius, state-wide employment trends, estimated start-up equipment cost, estimated annual operating cost, estimated cost per placement, and evidenced local business/industry support for proposed program. The definitions of those factors and the standards or weights assigned to each are included in the following section which describes the recommended model.

In attempting to "get a handle" on these factors, it was decided that a close look would be taken of the employment data provided in the most recent AEC Study, current data from the Labor Department, the current State Plan, and employment data furnished by the area planning councils. That data, collectively, could provide a basis for the determination of state-wide employment trends and some preliminary information regarding unmet need within a 50 radius of the individual schools. Russ Meade of the State Board staff volunteered to synthesize most of those data elements and subsequently provided each school a computer printout of employment data for each county within each school's service area.

The pilot school directors felt that the determination of unmet need within a 50 mile radius of the school should be the responsibility of that local school. Guided discussions were then conducted to outline preliminary

management plans for conducting local employment surveys. A summary of those suggested procedures and forms are included in Appendix G.

In attempting to begin this process, the pilot school directors quickly recognized the need for adequate staff and resources to complete the task at hand. The need for pre-planning became readily apparent, as did recognition of the fact that the survey in itself represented a major public relations effort necessitating a business demeanor by all staff members involved.

Because of prior commitments to other efforts as well as fulfilling the normal demands of the school's operation, only one school, Savannah Area Vocational-Technical School, was able to complete the pilot effort of determining unmet need for selected occupational areas. Two other schools, Brunswick Junior College and Griffin-Spaulding Area Vocational-Technical School, conducted a more limited unmet need survey within the 50 mile radius of their respective schools. Macon Vocational-Technical School chose to postpone all consideration of new or expanded programs in order to concentrate on the improvement of ongoing programs and to launch a major study the following year at which time the school would be eligible for a planning grant. The fifth school, Troup Vocational-Technical School, simply did not have the staff available to conduct the survey.

The three factors relating to cost in the weighted index were said to be the responsibility of the staff of the State Board (and State Office at the time). Although it was recognized that cost data had to be

generated locally, it was recognized as a state responsibility to synthesize those data elements into state-wide averages.

A simultaneous effort was conducted by the project staff to determine the availability of cost data at the state and local level, to determine the congruence of the data elements, and to determine the consistency in data collection procedures. Five schools were identified by the project monitors as sites which might be examined for cost accounting purposes. The purpose of visiting those schools was to determine the problems which they had encountered in attempting to identify program costs as a basis for internal budgeting. State inventory printouts and other state cost records were reviewed, and cost accounting models developed by other states were studied.

As with the assessment of current program effectiveness uncovered several major problems, so too did the efforts to identify credible data bases for the six factors recommended for inclusion in the weighted index.

PROBLEMS ENCOUNTERED:

Among the major problems encountered were the following:

1. The identification of unmet need data on a state-wide basis has been marginal. The data reflected in the current State Plan are relevant to only a fractional number of the current programs offered. Of the numerous vocational programs identified by the U.S. Department of Education, Georgia offers only a fractional number. Of those programs not offered, the dearth of data is even more evident. This limited data base provides little support to the local school in justifying expanded programs and practically no documentation for the justification of new programs.

PROBLEMS ENCOUNTERED -- continued:

2. The data included in the most recent AEC study likewise provides little help in the identification of unmet need. Its emphasis focuses on current employment and demographic changes which restricts its usefulness primarily to supplemental rather than preparatory vocational education programs.

3. The computerized inventory list of specific program equipment by school is inputed from the 101 form which usually includes equipment items for multiple programs. No procedure was evidenced which specifically earmarked equipment items for particular programs. This included the purchase of both single equipment items, i.e. seed generator charged to Marketing/Merchandising program, as well as quantity lot purchases, i.e. tables and chairs.

4. In most instances, equipment purchases are charged back to the general program taxonomy number rather than to explicit programs, i.e. to 14.0000 rather than to 14.0102. Although it is recognized that many equipment items may be shared in a core curriculum, no attempt is made to determine relative use so as to pro rate the cost of such equipment.

5. In many instances, equipment for given programs is charged to other cost centers in the school, most frequently to "administrative cost". Examples have included "sheet metal", "microscopes" and "student desks/tables".

6. Examples were found wherein equipment purchases were charged to two or more programs. Although pro rated cost should be a basic component in a cost accounting system, double charges for the same equipment is obviously an error.

7. Actual operating cost by program is not maintained at the local level, and there appears to be no attempt to identify cost differentials among programs at the state level. Little or no differentiation can be made between high cost and low cost programs. Cost allocations are most often made by teacher unit and have little relationship to program enrollments or to unique costs associated with given programs.

8. In most instances the cost data identified related to "day" programs only which adds another dimension of ambiguity and distortion to the determination of cost per completion and cost per placement.

The establishment of a cost accounting system which is uniform throughout the state will apparently not be an easy task. A review of cost studies and systems established in other states reveals multiple problems. Three models which do show promise, however, are described in abbreviated form in Appendix H.

Intermediate Critique

After the project had been underway some three months, a need was felt to have the team critique the total process to date. At that point, all of the schools had completed the preliminary assessment of all programs, most had completed the secondary assessment of their "C" programs, and several had completed their followup Program Improvement Plans for their "C" programs. Little had been done, however, in initiating the local surveys to determine the unmet need for selected programs.

A series of questions was posed to the team members when they assembled for their monthly project meeting. They were asked to respond in writing to each question and to refrain from discussing the items until after the process had been completed. The questions posed as incomplete statements included:

> "In regard to the three criteria/indicators identified for the preliminary assessment of program effectiveness, my major concerns are --- "
>
> "My recommendations are ---"
>
> "In regard to the criteria identified for secondary assessment of program effectivenss, my major concerns are --- "
>
> "My major recommendations are --- "
>
> "In considering the recommendation of combining the criteria into one assessment for all programs, my reaction is --- "

"In regard to the proposed standards set for the assessment of ongoing programs, my primary recommendation is --- "

"In regard to the procedures proposed, my primary recommendation is --- "

"Of the total assessment process for ongoing programs to date, the three strongest features are --- "

"Of the total assessment process for ongoing programs to date, the three weakest features are --- "

"My three recommendations for addressing the weaknesses are --- "

All comments, reactions and recommendations generated by the team members were reported on a followup form. This instrument asked the team members to indicate agreement or disagreement in writing to each of the comments listed under each question. A space was also provided for their comments in reaction to each item. The instrument used for this exercise is included in Appendix I.

The major strengths of the total assessment process as identified by the group at that point in time included:

"Three standards for primary assessment. Comprehensiveness of criteria. Followup plan for program improvement."

"Organized plan of action and good leadership. Method of organizing program modification good."

"Local involvement. Systematic process. Timing."

"Provides a formal system of evaluation consistent all over the state. Provides for recommendations to improve weak programs. Provides for budget request to modify, expand.

The major weaknesses identified at that point included:

"Use of averages."

"Credibility of figures."

"Data base if poor. MIS definitions are vague."

Two months later, or by the end of May, the team had concluded their efforts in the identification of criteria or indicators which would reflect the "general health" of ongoing programs, the identification of standards or yardsticks against which that health could be judged, and the description of suggested management procedures for conducting the assessment process and for outlining followup Program Improvement Plans. Although the accuracy of the data base was still questionnable, the team seemed satisfied that the identification of the six indicators with their accompanying standards and procedures were viable factors which could provide a quick "pulse" of a program's effectiveness. Too, they felt that the criteria used in the secondary assessment process could provide "partial clues" to causes of program deficiencies, but that the complete diagnosis was dependent upon the ability of the management and instructional staffs. All of the team members recognized the need for developing and maintaining a more accurate data at the local school level from which direct input could be made into the state MIS system (or comparable system developed by the staff of the State Board for Vocational Education).

Little objective reaction or input could be given by the team at the end of May relative to the further refinement of the recommended weighted index and its criteria, weights and suggested procedures. This, of course, was reflected of the limited field-test effort conducted by the pilot schools due primarily to the major restrictions of adequate resources at the local level to undertake that type of effort and the lack of state-wide data regarding employment trends and costs.

The evaluation, planning and budgeting model as recommended by the team as a result of the total project effort is described in the following section.

THE RECOMMENDED EVALUTION, PLANNING AND BUDGETING MODEL

Planning is predicated on two major data items: knowing where you are and where you want to go which necessitates a comprehensive evaluation effort as a preclude to planning. Using an accurate data base, the process of planning becomes one of identifying, selecting and organizing alternative strategies for reaching the desired destination. The budgeting component follows as a logical outgrowth of the planning process in that it identifies the resources needed to implement the plan effectively and efficiently.

This integrated process is reflected in the schematic of the model depicted on the following two pages. The evaluation of on-going programs is seen to include two assessment processes, one for all programs and a followup assessment for those programs which fail to meet state standards. The followup of that assessment process is the development of a comprehensive Program Improvement Plan which outlines specific actions to be taken, together with timelines and staff assignments for either bringing that given program up to state standards, modifying or redirecting the primary focus of the program, or outlining an orderly termination of the program. The resources requisite for conducting those activities outlined in the Program Improvement Plan are reflected in its accompanying budget.

Likewise, the assessment of need for new or expanded programs is conducted with a focus on six major criteria which are subsequently compiled into a weighted index with priorities identified. Specific activities for initiating the new or expanded program are comprehensively outlined in the Program Initiation/Expansion Plan with its requisite costs reflected in the accompanying budget document.

EVALUATION, PLANNING & BUDGETING MODEL

EVALUATION: ON-GOING PROGRAMS

PRIMARY ASSESSMENT: ALL PROGRAMS

KEY INDICATORS:

Enrollment:
- 3 yr average to standard
- 3 yr trend

Completion:
- 3 yr average to standard
- 3 yr trend

Placement:
- 3 yr average to standard
- 3 yr trend

SECONDARY ASSESSMENT: "C" PROGRAMS

KEY INDICATORS:

- Employer Evaluation
- Student Evaluation
- Assessment of Facilities
- Assessment of Equipment & Instructional Materials
- Assessment of Business Support

PLANNING: PROGRAM IMPROVEMENT PLAN FOR "C" PROGRAMS

IDENTIFY:

- Cause(s) for Deficiency
- Corrective Action to be Taken
- Program Improvement Objectives
- Strategies for Accomplishment
- Specified Timelines
- Specified Staff Assignments
- Evaluation Measures

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EVALUATION: NEW/EXPANDED PROGRAMS

KEY INDICATORS:

- STATE-WIDE EMPLOYMENT TRENDS
- UNMET NEED WITHIN 50 MILE RADIUS
- ESTIMATED START-UP EQUIPMENT COST
- ESTIMATED ANNUAL OPERATING COST
- ESTIMATED COST PER PLACEMENT
- EVIDENCED LOCAL BUSINESS/INDUSTRY SUPPORT FOR PROGRAM

PLANNING: PROGRAM INITIATION/EXPANSION PLAN

IDENTIFY:

- Documentation of justification
- Specific Program Objectives
- Strategies for Accomplishment
- Specified Timelines
- Specified Staff Assignments
- Evaluation Measures

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BUDGETING: PROGRAM IMPROVEMENT/INITIATION/EXPANSION

IDENTIFY:

- PLANT EXPANSION/RENOVATION
- EQUIPMENT PURCHASE/REPLACEMENT
- STAFF SALARIES
- SUPPLIES/MATERIALS
- TRAVEL
- STAFF DEVELOPMENT
- CONTRACTED/LEASED SERVICES/EQUIPMENT
- OTHER (SPECIFY)

EVALUATION: ON-GOING PROGRAMS
KEY INDICATORS AND DEFINITIONS

PRIMARY ASSESSMENT:

ENROLLMENT: Total enrollment by taxonomy of students enrolled on a full-time basis in occupational education programs; (Refer to State Board for current definition of "full-time")

3-YEAR AVERAGE ENROLLMENT BY INSTRUCTOR: Average annual enrollment by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE ENROLLMENT BY INSTRUCTOR: Comparison of first year average annual enrollment by instructor to third year average annual enrollment by instructor

COMPLETION: Includes the total number of graduates and students who have completed the program with certifiable job skills and who are available for employment.

3-YEAR AVERAGE COMPLETION BY INSTRUCTOR: Average annual completion by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE COMPLETION BY INSTRUCTOR: Comparison of first year average annual completion by instructor to third year average annual completion by instructor

PLACEMENT: Includes the total number of positive placements identified as the number employed in field for which trained, number employed in a related field, number continuing their education and number entering the military.

3-YEAR AVERAGE PLACEMENT BY INSTRUCTOR: Average annual placement by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE PLACEMENT BY INSTRUCTOR: Comparison of first year average annual placement by instructor to third year average annual placement by instructor

SOURCE OF DATA: MIS unduplicated enrollment report issued Fall Quarter each year (NOTE: Until such time as the MIS system applies the definition of full-time student consistently to both day and evening programs, enrollment data may have to be obtained from school attendance reports.)

EVALUATION: ON-GOING PROGRAMS

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

KEY INDICATOR	CATEGORY A (90% WT)	CATEGORY B (80% WT)	CATEGORY C (70% WT)
PRIMARY ASSESSMENT:			
3 YR AVERAGE ENROLLMENT BY INSTRUCTOR TO STANDARD	14+	10-14	Less than 10
3 YR ENROLLMENT TREND BY INSTRUCTOR	Increase of more than 10% OR stable enrollment of 14+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
3 YR AVERAGE COMPLETION BY INSTRUCTOR TO STANDARD	10+	8-10	Less than 8
3 YR COMPLETION TREND BY INSTRUCTOR	Increase of more than 10% OR stable completion of 10+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
3 YR AVERAGE PLACEMENT BY INSTRUCTOR TO STANDARD	8+	6-8	Less than 6
3 YR PLACEMENT TREND BY INSTRUCTOR	Increase of more than 10% OR stable placement of 6+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
SUMMARY CATEGORIZATION	CATEGORY A Average of +87% weight for 6 indicators	CATEGORY B Average of 74-87% weight for 6 indicators	CATEGORY C Average of less than 74% weight for 6 indicators

EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS AND DEFINITIONS

EMPLOYER EVALUATION OF STUDENTS: Annual employer evaluation conducted by state MIS system in cooperation with the local school to determine the employers' assessment of such items as technical knowledge, work attitude, work quality, relative preparation and overall rating of student performance.

STUDENT EVALUATION OF PROGRAM: Annual student evaluation of program conducted by state MIS system in cooperation with the local school school to determine the students' assessment of such items as job preparation, instructional content, tools and equipment, teacher presentations in class, teacher presentations in laboratory, organization of instruction, grading and testing procedures, interest of the instructor, and class size.

ASSESSMENT OF FACILITIES: Annual assessment of appropriateness and condition of program facilities as determined by a team composed of the instructional coordinator, instructor, advisory committee member and others as may be designated locally, using an established instrument.

ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS: Annual assessment of appropriateness and condition of program equipment and instructional materials as determined by a team composed of the instructional coordinator, the instructor, an advisory committee member and others as may be designated locally, using an established instrument.

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION: Annual assessment of extent to which the business/industrial community have supported the program and representatives have participated in designed program support activities. This assessment is conducted annually by the instructional coordinator together with the instructor using an established instrument.

SOURCES: The MIS employer and student followup reports completed annually and issued during the Fall Quarter will be used to as the data source for the EMPLOYER ASSESSMENT and for the STUDENT ASSESSMENT. Refer to the EPB-MODEL proposed forms for ASSESSMENT OF FACILITIES, ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS, AND ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION.

SUMMARY OF PROPOSED CATEGORIAL STANDARDS -- SECONDARY ASSESSMENT

KEY INDICATOR: SECONDARY ASSESSMENT	CATEGORY A (Healthy sign; look elsewhere for cause of problem)	CATEGORY B (May be some cause for concern; keep an eye on this)	CATEGORY C (Definite cause for concern; investigate)
3 YEAR AVERAGE, EMPLOYER OVERALL RATING	4.5 and above	4.0-4.4	Less than 4.0
3 YEAR AVERAGE, MEAN STUDENT RATING	90% and above	80-89%	Less than 80%
ASSESSMENT OF FACILITIES	Total rating of 62 or over	Total rating of 42-61	Total rating of less than 42
ASSESSMENT OF EQUIPMENT & MATERIALS	Total rating of 62 or over	Total rating of 42-61	Total rating of less than 42
ASSESSMENT OF BUSINESS SUPPORT/PARTICIPATION	14 or more YES	11-13 YES	Less than 11 YES

STUDENT EVALUATION

ROGRAM TITLE & TAX. #	JOB PREP.	INSTRUC. CONTENT	TOOLS & EQUIP.	PRES. IN-CLA.	PRES. IN-LAB	ORG. INST.	GRAD/ TEST	INST. INT.	CLASS SIZE	MEAN RATING

30

DIRECTIONS: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of nine items to determine "mean rating" in last column. Enter percentage and category of program effectiveness using the following standards for the last column: CATEGORY A = 90%+, CATEGORY B = 80-89%, CATEGORY C = less than 80%.

EMPLOYER EVALUATION OF STUDENTS

PROGRAM TITLE & TAXONOMY #	TECHNICAL KNOWLEDGE	WORK ATTITUDE	WORK QUALITY	OVERALL RATING	RELATIVE PREPARA.	MEAN RATING ALL ITEMS	CATEGOI

Directions: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of five items to determine "mean rating, all items". Identify category of program effectiveness using the following standards for the last column: CATEGORY A = 4.5+; CATEGORY B = 4.0-4.4 CATEGORY C = Less than 4.0.

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION

Please identify those criteria identified below for which you find evidence of business/industry participation and support in program planning, operation, and/or evaluation.

		YES	NO
1.	Provided input to instructional staff re program objectives, content outline, instructional activities.	____	____
2.	Reviewed course outlines and materials for appropriateness.	____	____
3.	Provided opportunities for student internships, practicuums, OJT, and/or clinical experiences.	____	____
4.	Provided opportunities for instructor to update technical skill by participating in in-house activities.	____	____
5.	Served as guest speaker/guest lecturer.	____	____
6.	Provided training materials appropriate to instructional objectives of program.	____	____
7.	Provided equipment on loan and/or donated equipment appropriate for use in the instructional program.	____	____
8.	Assessed adequacy of program's facilities and equipment.	____	____
9.	Assessed adequacy of program's instructional materials and supplies.	____	____
10.	Referred other business/industry representatives to program staff.	____	____
11.	Referred his/her employees to program for refresher training and/or requested in-house training of employees by instructional staff.	____	____
12.	Assisted in developing maintenance, safety and security policies/procedures for the operation of the program.	____	____
13.	Arranged visits to business/industry plants for faculty and/or students.	____	____
14.	Promoted/publicized the program to company employees, their families, other business and/or the general community through each media as house organs, bulletin boards, news stories, civic club presentations.	____	____
15.	Provided career and job placement advice to students.	____	____
16.	Sponsored scholarships or other financial assistance to students.	____	____
17.	Provided recognition for outstanding students.	____	____
18.	Recruited and hired program completers.	____	____

OTHER _____

ASSESSMENT OF EQUIPMENT
AND INSTRUCTIONAL MATERIALS

Please check the response which most closely approximates your opinion and include any additional comments which you may deem appropriate. Use the scale below as a guide to identify your response.

5 -- Excellent in all respects; excellent condition
4 -- One or two items may need some repair; but overall in good condition
3 -- Several items are in need of repair and/or replacement; overall condition is fair
2 -- The majority of the items are in need of repair and/or replacement; overall condition is poor
1 -- Practically all of the items are in need of repair and/or replacement; condition is unacceptab
N/A - Statement does not apply to local situation.

1. The equipment in the laboratory reflects current technology and is presently being used in business/industry.	NA	1	2	3	4
2. The type, variety and quantity of tools and equipment are adequate and appropriate for meeting the instructional objectives of the program.	NA	1	2	3	4
3. The equipment and tools are in good repair.	NA	1	2	3	4
4. The equipment is sufficiently durable for the identified instructional purposes.	NA	1	2	3	4
5. The equipment is basically hazardless to use when operated according to instructions.	NA	1	2	3	4
6. The equipment is appropriate and safe for use by handicapped students.	NA	1	2	3	4
7. Cut-off switches for machines and equipment are easily identifiable and reachable from the operator's position.	NA	1	2	3	4
8. Safety guards, where appropriate, are provided and are secured to the machines.	NA	1	2	3	4
9. All machines and equipment, except portable machines and equipment, are appropriately secured as needed to prevent walking or moving.	NA	1	2	3	4
10. Equipment and tools are properly stored.	NA	1	2	3	4
11. The instructional materials are current and reflect contemporary concepts and practices.	NA	1	2	3	4
12. The instructional materials are appropriate for the accomplishment of the identified objectives.	NA	1	2	3	4
13. The materials are written at a reading level appropriate to the average student enrolled in the program.	NA	1	2	3	4
14. Alternative instructional materials are provided for special needs students.	NA	1	2	3	4
15. The instructional materials provide appropriate problem solving activities which will enhance the transfer of learning to alternative work environments and situations.	NA	1	2	3	4

COMMENTS: _____

ASSESSMENT OF FACILITIES

Please circle the response which most closely approximates your opinion and include any additional comments which you may deem appropriate. Use the scale below as a guide to identify your response.

5 -- Excellent condition
4 -- Good condition
3 -- Fair condition
2 -- Poor Condition
1 -- Condition is unacceptable
N/A - Item does not apply to local situation

1. The facility is comparable to or simulates current business facilities for that occupational area.	NA	1	2	3	4	5
2. The facility is located next to other comparable or related facilities where appropriate, e.g. auto body/auto mech.	NA	1	2	3	4	5
3. Space allocations for classrooms are appropriate for the number of students enrolled.	NA	1	2	3	4	5
4. Space allocations for laboratories are appropriate for the number of students enrolled.	NA	1	2	3	4	5
5. Space allocations for storage areas are appropriate for the type of program and number of students enrolled.	NA	1	2	3	4	5
6. The external structures--roof, walls, entrances--are in good condition and are structurally sound.	NA	1	2	3	4	5
7. The adjacent internal structures--stairs, corridors, lobbies--are safe, structurally sound, and attractive.	NA	1	2	3	4	5
8. Environmental conditions--heating, cooling, lighting, accoustics, brightness--are condusive to learning.	NA	1	2	3	4	5
9. The arrangement of the instructional areas flexible and adequate for a variety of learning activities.	NA	1	2	3	4	5
10. Storage facilities are adequate and are easily accessible.	NA	1	2	3	4	5
11. Handicapped and/or physically disabled students have access to space that accommodates their needs.	NA	1	2	3	4	5
12. Fire resistant storage areas are available to store combustible material.	NA	1	2	3	4	5
13. Fire extinguishers are accessible where appropriate and are in good condition.	NA	1	2	3	4	5
14. Electrical outlets and control switches are in safe condition and are readily accessible.	NA	1	2	3	4	5
15. The heating and ventilation system maintains comfortable and healthful conditions including properly installed filtering for smoke, odors, fumes, gases.	NA	1	2	3	4	5

COMMENTS _____

_____

PROGRAM IMPROVEMENT PLAN FOR "C" PROGRAMS

PROGRAM: _____

MAJOR DEFICIENCY AS NOTED FROM ASSESSMENT CRITERIA: _____

IDENTIFIED CAUSE(S) FOR DEFICIENCY _____

_____

FOLLOW-UP ACTION TO BE TAKEN:

Activity	Timelines	Person Responsible

BUDGET REQUIREMENTS, IF ANY, OVER-AND-ABOVE REGULAR FUNDING:

Category	Amount	Justification
Salary		
Travel		
Staff Development		
Equipment		
Supplies/Materials		
Other (Specify)		
TOTAL		

EVALUATION: NEW AND EXPANDED PROGRAMS
KEY INDICATORS FOR PROGRAM JUSTIFICATION

STATE-WIDE EMPLOYMENT TRENDS: Increase, decrease or stable employment trends evidenced on a state-wide basis for the occupation(s) under consideration as determined by the Department of Labor, the staff of the State Board for Postsecondary Vocational Education, or other sources as identified by the staff of the PVE Board.

UNMET NEED WITHIN 50 MILE RADIUS: Difference between employment demand (including additions and replacements) and estimated employment supply for the occupation(s) under consideration within a 50 mile radius of the school as determined by the staff of the school using instruments and procedures approved by the staff of the PVE Board.

ESTIMATED START-UP EQUIPMENT COST: The total cost estimated by the staff of the PVE Board to either initiate a new program in a designated occupational area and/or to expand a given program using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

ESTIMATED ANNUAL OPERATING COST: The total cost estimated by the staff of the PVE Board to operate a designated instructional program for a year using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

ESTIMATED COST PER PLACEMENT: The total cost estimated by the staff of the PVE Board per positive placement in a designated instructional program using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

EVIDENCED LOCAL BUSINESS/INDUSTRY SUPPORT FOR PROPOSED PROGRAM: The interest and support of the business and industrial community within a 50 mile radius of the school as evidenced on survey instruments approved by the staff of the PVE Board and used by the staff of the local school to identify UNMET NEED.

EMPLOYMENT DEMAND SURVEY

COMPANY _____ DATE _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE(s) _____

CONTACT PERSON _____ TITLE _____

For the items given below, simply check the response which best represents your opinion or specify your "other" response where appropriate. On the second page, please furnish your demand estimates for the occupations identified. Thank you for your assistance.

1. Does your company currently provide in-house training for your employees?

   ___ Yes ___ No

2. If YES, identify the type(s) of training provided. Check as many as are applicable.

   ___ OJT
   ___ Apprenticeship
   ___ Formal classes
   ___ Pay tuition for employee to attend designated classes
   ___ Contract with outside agencies/persons for designated training
   ___ Other, Specify _____

3. Major source of recruitment for the occupations identified on page 2.

   ___ Area voc-tech schools
   ___ High schools
   ___ Private schools
   ___ Junior colleges
   ___ Colleges/universities
   ___ Other companies
   ___ Other, specify _____

4. Typical level of training required by your company in hiring persons for occupations identified on page 2.

   ___ High School Diploma
   ___ Area Voc-Tech School Certificate/Degree
   ___ Junior College, Associate Degree
   ___ 4-Year College Degree
   ___ OJT
   ___ Apprenticeship
   ___ Other, specify _____.

5. If a full-time program were offered to prepare persons for the occupation identified on page 2, would you and the management staff of your company support the program in the following ways. Check those applicable.

   ___ Serve on advisory committee
   ___ Advise on curriculum materials
   ___ Serve as guest speaker
   ___ Provide training materials
   ___ Provide equipment
   ___ Provide OJT, internships for students
   ___ Provide OJT, internships for program instructors
   ___ Refer other businesses to progra
   ___ Refer employees to program
   ___ Arrange company tours
   ___ Evaluate program
   ___ Publicize program in company
   ___ Sponsor scholarships
   ___ Recruit program graduates
   ___ Other, specify _____

   If you could not support this type of program, why not _____

EMPLOYMENT DEMAND SURVEY

OCCUPATIONAL TITLE	# CURRENTLY EMPLOYED	TREND OVER LAST 5 YRS		AVERAGE ANNUAL # NEW JOBS ADDED	AVERAGE ANNUAL # OF REPLACEMENTS HIRED	TOTAL ANNUAL DEMAND: NEW + REPLACEMENTS
		UP	DOWN			

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UNMET NEED PROJECTIONS

OCCUPATIONAL TITLE	DEMAND ESTIMATES			SUPPLY ESTIMATES			NET UNMET NEED
	TOTAL NEW ADDITIONS	TOTAL NUMBER REPLACEMENTS	TOTAL DEMAND	COMP. OF VOC PROG.	OTHERS, INC. PRIV. SCHOOLS	TOTAL SUPPLY	

ROGRAM: _____ PLANNING GUIDE :

SPECIFIC OBJECTIVES	RATIONALE	STRATEGIES/ACTIVITIES PLANNED TO ACHIEVE OBJECTIVE	STRATEGY TIMELINES	
			PLANNED DATE OF COMPLE.	ACTUAL COMPLE.

PROGRAM INITIATION OR EXPANSION

PERSON(S) RESPONSIBLE	FACILITIES, SUPPLIES, EQUIPMENT PERSONNEL NEEDED (SPECIFY)	BUDGET REQUIREMENTS BASED ON PREV. COL.	EVALUATION MEASURES	MANAGEMENT SIGN-OFF

SUMMARY SCHEDULE FOR DATA COLLECTION, EVALUATION, PLANNING, BUDGETING

FY (3rd Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

FY (2nd Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

FY (1st Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

CURRENT FISCAL YEAR --

SUMMER QUARTER -- Preliminary plans made to assess unmet need within 50 mile radius of school for new or expanded programs; review made of state-wide employment trends and demand

FALL QUARTER -- Conduct assessment of all on-going programs; conduct secondary assessment of programs categorized as "C" by six key indicators. Complete assessment of unmet need for new or expanded programs; review cost data from state; complete weighted index profile of all proposed program additions and/or expansions to determine priority

WINTER QUARTER -- Complete Program Improvement Plan of follow-up measures to be taken for all "C" programs and others as may be needed. Identify budget need requirements for measures identified in Program Improvement Plan. Complete Program Planning Guide for New and Expanded Programs. Identify budget need requirements for components identified in Program Planning Guide. Submit assessment data from on-going programs, weighted index profile with program priorities, Program Improvement Plan, Program Planning Guide, and budget requests to the state staff of the State Board for Postsecondary Vocational Education.

BEST COPY AVAILABLE

RECOMMENDATIONS FOR STAFF OF STATE BOARD FOR POSTSECONDARY VOCATIONAL EDUCATION

The recommendations presented below reflect those of the project director based on both formative and summative evaluations. It is the hope that these recommendations will be given serious consideration by both the staff and the State Board members as you work collectively to strengthen the state-wide network of postsecondary and adult vocational education programs in Georgia.

RECOMMENDATIONS

1. The model, as recommended wherein by the project team, should be field-tested on a state-wide basis. For those schools which were not involved in this pilot effort, their primary focus should be on the assessment of on-going programs with the subsequent development of Program Improvement Plans and accompanying budget documents. For those schools which were involved in this pilot effort, their primary focus should be on needs assessment for new and expanded programs.

2. A comprehensive, continuous program of staff development should be specifically designed and conducted to develop those competencies requisite for the implementation of the evaluation, planning and budgeting model at the local school level. The staff development programs should be designed for "management teams" in the respective schools rather than for single representatives. This effort should be initiated during the Fall of 1985 and continue throughout the next two-year period.

3. An effort should be made to identify the resources requisite for successfully implementing the model at the local and state levels. Pre-planning activities should be outlined, scheduled and resources provided to help assure success.

4. As the model is field-tested on a state-wide basis, further attention should be given to the refinement of the definitions of primary indicators/criteria recommended in the model. Every effort should be made to assure congruence among the defintions used for the same terms in different staff efforts.

RECOMMENDATIONS — continued

5. Changes should be made in the state's local application process to reflect budget requests which are the outgrowth of an integrated evaluation and planning effort at the local level. Program Improvement Plans should accompany budget applications for ongoing programs with particular focus on those programs classified as "C" programs. Program Intiation/Expansion Plans should accompany budget applications for new and expanded programs. The criteria and standards recommended in the model or as may be subsequently refined should be closely adhered to by the local staff in submitting budget applications and by the State Board staff in reviewing those applications for forwarding to the Office of Planning and Budgeting.

6. A uniform cost accounting system should be established for utilization in all area schools throughout the State. Within the system, uniform definitions should be established along with uniform procedures wherein actual program costs can be identified.

7. A business manager qualified in cost accounting should be provided in each of the area schools throughout the State.

8. A state-wide data base should be established and computerized which includes the identification of unmet need for at least all of the four-digit program taxonomy codes identified by the U.S. Department of Education. The data should be continuous updated and formated to serve local, regional and state-wide needs. In addition to unmet need projections, the state data base should include data on major demographic characteristics and projected changes, as well as data on current employment which could be used as a basis for supplemental program planning.

9. A Management Information System should be specifically designed to meet the needs of the postsecondary schools. The system should provide for direct input by the local schools into a state-wide data bank, the establishment of clear, uniform definitions of terms, and intense staff development programs for the schools' total management team in the interpretation of the terms and the uniform use of common procedures.

10. In implementing the model on a state-wide basis, particular attention should be focused on the definition of the terms "full-time" and "part-time". Attention should be given to the development of innovative configurations of program formats, schedules and site locations in order to meet the needs of persons for both preparatory and supplemental programs regardless of the time of day or program location.

APPENDIX A

SUMMARY, STATE BOARD PRESENTATION
DECEMBER 6, 1984

POST SECONDARY BOARD FOR VOCATIONAL EDUCATION

PLANNING, EVALUATION & BUDGETING MODEL

DECEMBER 6, 1984

TWO MAJOR TYPES OF PLANNING

STRATEGIC PLANNING

*Has a relatively long time frame.

*Is fairly broad in scope.

*Includes the basis for the identification of short-term program objectives.

*Identified to improve the performance in order to accomplish the mission and educational goals of the institution.

*Includes a high involvement of central planning unit administrators.

OPERATIONAL PLANNING

*Has a short time frame.

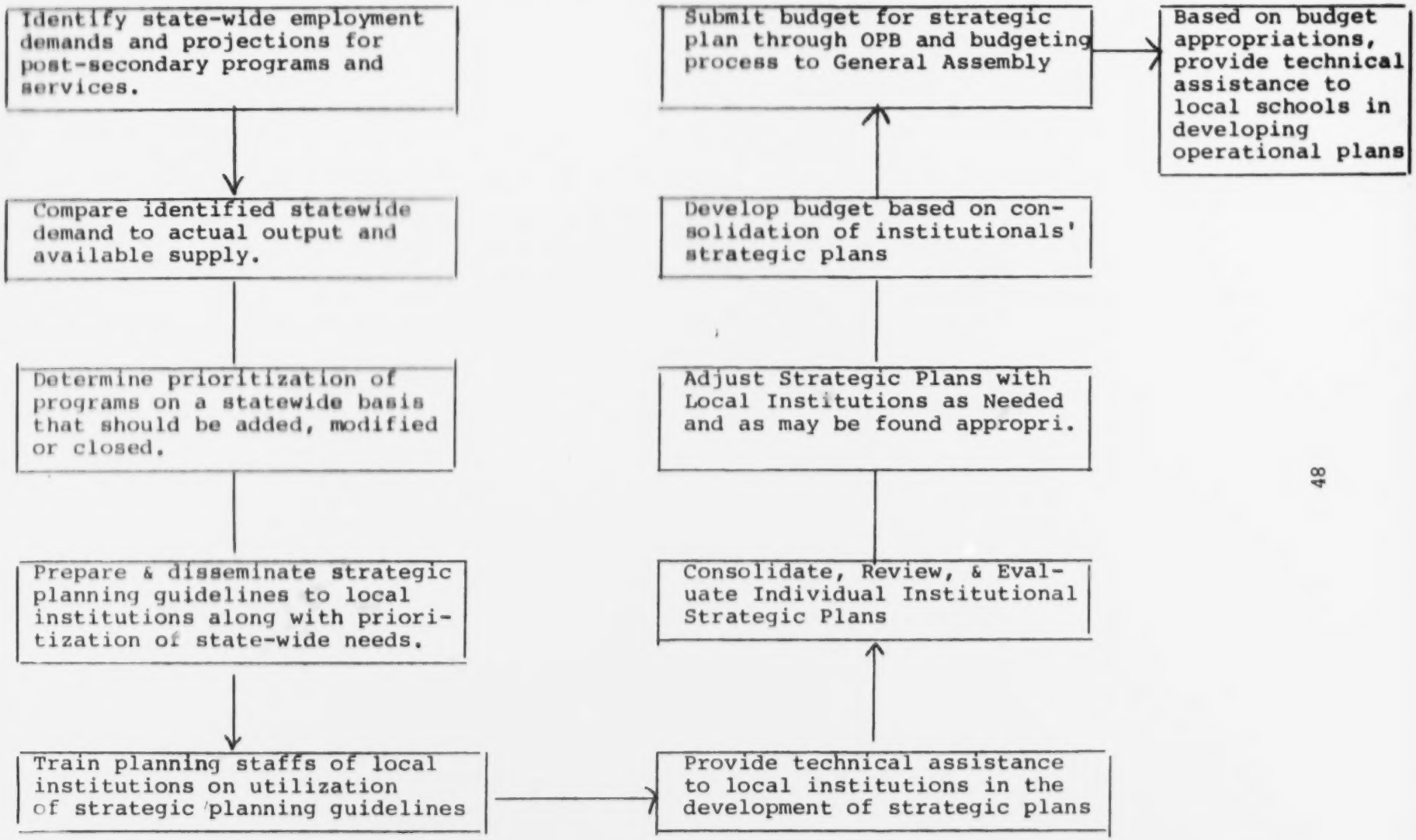
*Is narrow in scope.

*Assumes that a set of broad organizational goals and objectives exist (Strategic Plan)

*Includes specifically defined objectives, tasks/activities and timelines for implementation

*Greater number of people involved both externally and internally--usually includes all staff members to some extent

STRATEGIC PLANNING PROCESS -- STATE LEVEL



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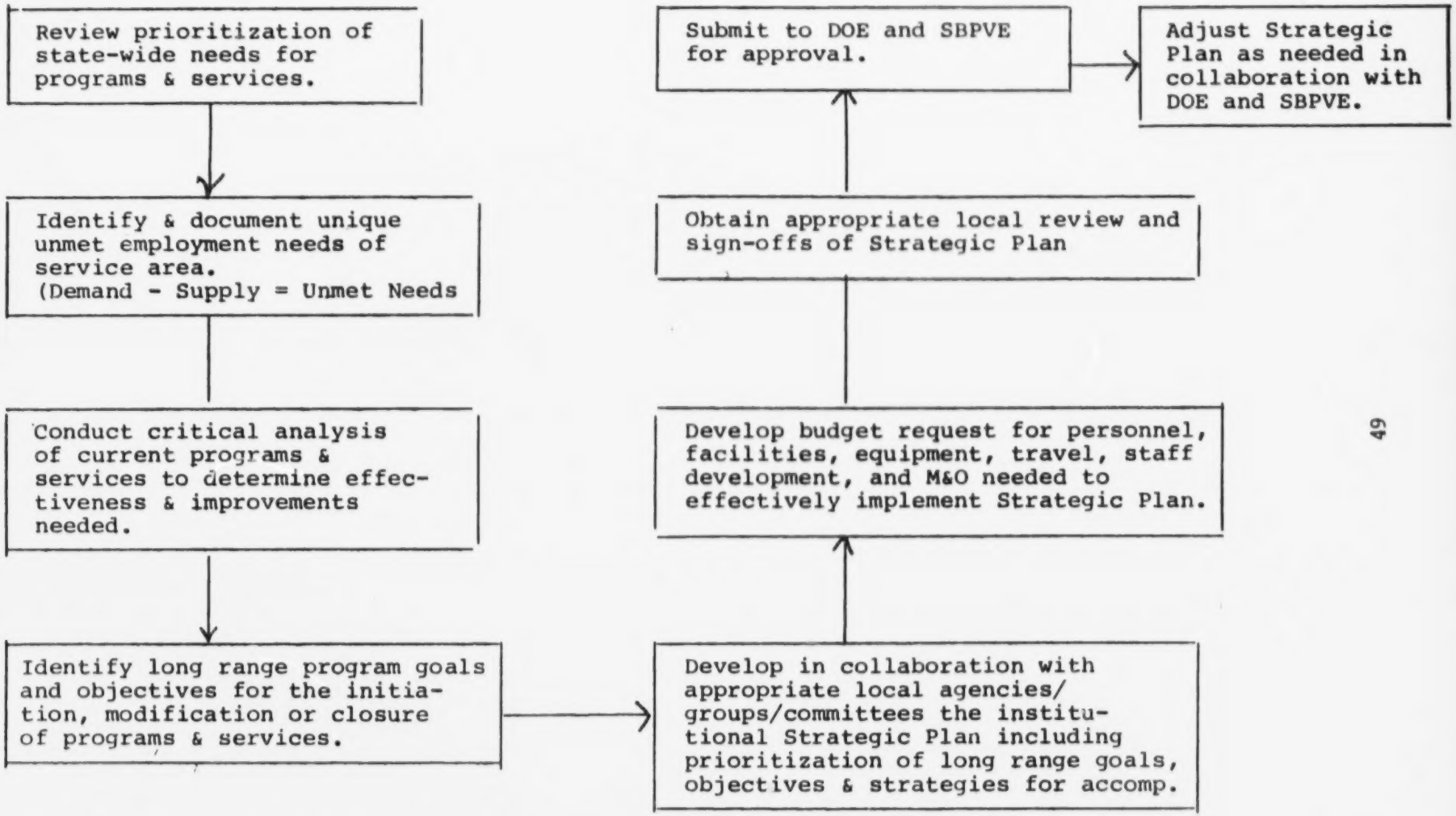
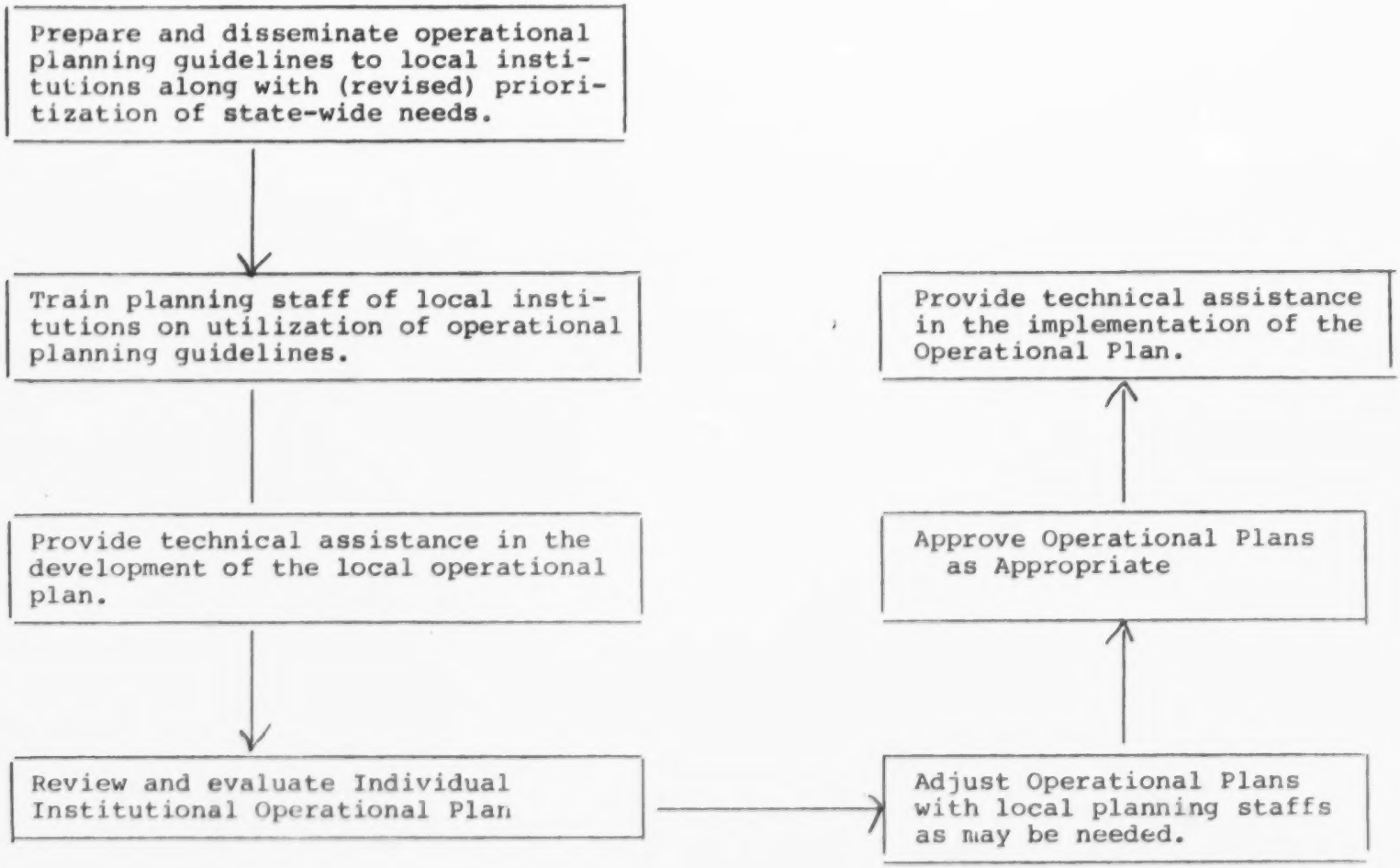
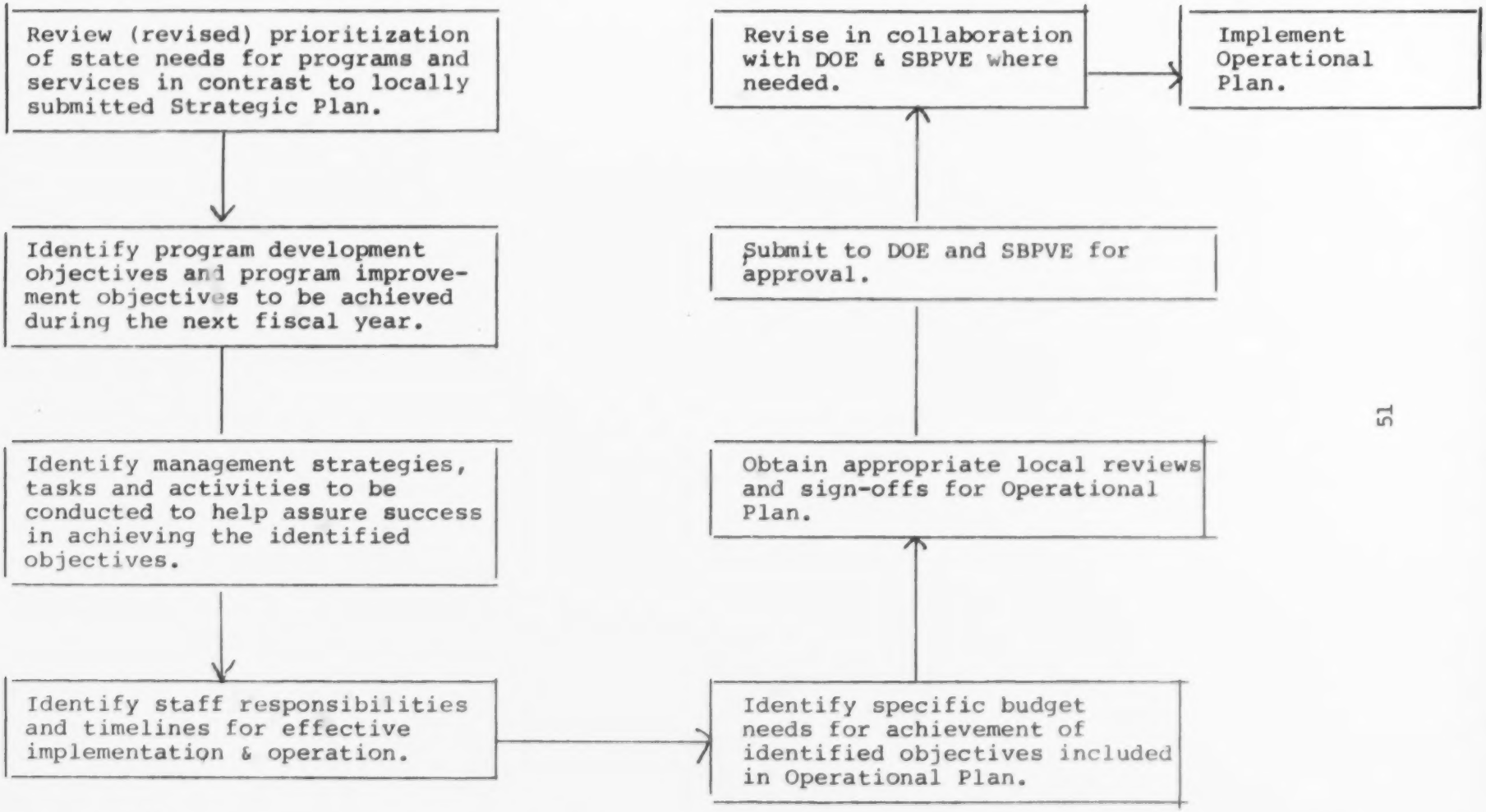
STRATEGIC PLANNING PROCESS -- LOCAL LEVEL



OPERATIONAL PLANNING PROCESS -- STATE LEVEL



OPERATIONAL PLANNING PROCESS -- LOCAL LEVEL



APPENDIX B

CRITERIA & DATA SOURCES FOR ASSESSING PROGRAM EFFECTIVENESS

CRITERIA AND DATA SOURCES FOR ASSESSING PROGRAM EFFECTIVENESS

CRITERION	DATA SOURCE(S)
Average quarterly enrollment per instructor, last 3 years.	MIS
Trend in quarterly enrollment per instructor for last 3 yrs.	MIS
Average completion rate per instructor for last 3 years.	MIS
Average placement rate in field or related field for which trained per instructor for last 3 years.	MIS
Employer satisfaction with quality of graduates' work.	MIS, FOLLOWUP REPORT
Job satisfaction of graduates.	MIS, FOLLOWUP REPORT
Average starting wage of graduates.	MIS, FOLLOWUP REPORT
Average wage of graduate six months after employment.	Local effort
Average cost per enrollee for last 3 years.	MIS
Average cost per placement, last 3 years	MIS and local effort
Average percentage of completers passing state licensing exam for last 3 years.	Local effort with state licensing boards
Average percentage of completers demonstrating acceptable competency levels as measured by standard proficiency measures.	Local instructors

CRITERION	DATA SOURCES
Average time taken by graduates to complete total program.	Local enrollment records/ instructor records
Average percentage of program completed by typical enrollee.	Local instructor records
Average percentage of grads over past 3 years who would enroll in the program again.	MIS, FOLLOWUP REPORT
Extent to which legal requirements were met.	Local effort
Average number of unemployed graduates looking for work.	MIS, Followup report
Teacher qualification	Local records
Extent to which individual program advisory committee was utilized.	Local records
Capacity and condition of facility.	Local review
Appropriateness and condition of equipment.	Local review, MIS followup report
Participation and support of business/ industry representatives in program planning, operation, evaluation.	Local records
Availability and quality of guidance/ counseling/diagnostic services provided to program enrollees.	Local review
Availability and effectiveness of placement service to program enrollees and graduates.	Local review
Availability and utilization of current training materials in program.	Local review

APPENDIX C

CRITERIA & DATA SOURCES FOR JUSTIFYING NEW PROGRAMS

CRITERIA AND DATA SOURCES FOR JUSTIFYING NEW PROGRAMS

CRITERION	DATA SOURCES
State-wide employment demand	State Plan, Dept. of Labor
Regional employment demand	ACE Study
Trends in employment demand as evidenced over last 3 years	Dept. of Labor
Typical working conditions	Craft advisory committees Local assessment
Average starting wage of trained employee	Dept. of Labor, Professional Associations, Local Assessment Craft advisory committees
Average wage of employee six months after employment.	Craft advisory committees Local assessment
Estimated payback time	MIS data and local assessment
Estimated start-up costs	DOE
Estimated operating costs	DOE
Estimated cost per enrollee	DOE
Estimated cost per placement	DOE
Typical restrictions on hiring in given occupational field.	Trade associations, local craft committees, local assessment
Occupational turnover in field	Trade associations, local craft committees, local assessment
General image of occupational area.	Local assessment

CRITERION	DATA SOURCES
Estimated training time required to develop required proficiency levels.	Trade associations, other programs in state, DOE
Occupational field found within top quartile of unmet need in state.	State Plan
High tech employment indicator	ACE Study
Job availability within 30 mile radius of school	Local assessment
Average placement rate in current programs throughout state.	DOE, MIS
Average quarterly enrollment in current programs throughout state.	DOE, MIS
Availability of facilities with minimum renovation.	Local assessment
Availability of qualified staff	Local assessment
Evidenced local business/industry support for program.	Local assessment
Potential for cooperative program design	Local assessment, DOE
Availability of ancillary/ support services for program	Local assessment
Estimated student appeal for enrollment	

CRITERION	DATA SOURCES
Accessibility to minorities, women, handicapped	DOE, local assessment
Potential for meeting legal requirements/restrictions	Licensing boards, agencies DOE, local assessment
Availability of appropriate instructional materials	DOE, commercial publishers, Business and industry
Recommended for school in 1984 ACE Study	ACE Study
OTHER	
OTHER	
OTHER	
OTHER	
OTHER	
OTHER	
OTHER	

APPENDIX D

ORIENTATION MEETING, TEAM MEMBERS

POST SECONDARY VOCATIONAL EDUCATION
EVALUATING--PLANNING--BUDGETING

January 15, 1985

Welcome

Introductions

Overview of Project Objectives

An Assessment of Past Evaluation and Planning Performance

Major Strengths and Weaknesses: State Level
Major Strengths and Weaknesses: Local Level

Designing a Model and a Process for Effective Decision-Making

Program Assessment:

- Identification of Criteria
- Identification of Data Sources
- Identification of Standards for Acceptability
- Review of Process
- Proposed Timelines

Development of Justification for New Program Requests:

- Identification of Criteria
- Identification of Data Sources
- Establishment of Priorities
- Review of Process
- Proposed Timelines

Relationship to Other Projects

Summary Comments from DOE and Postsecondary Board Staffs

Summary Comments from Project Director

Adjourn

ALTERNATIVE APPROACHES TO ESTABLISHING PRIORITIES

Essential Characteristic Method

PROGRAM	UNMET NEED	WAGES	START-UP COSTS	TURNOVER	WINNER
Computer Repair	+	+	+	+	+
Robotics	+	-	+	-	
Computer Proces.	-	+	-	+	

1. Identify criteria
2. Determine criticality of each criterion
3. Identify alternative programs considered
4. Determine "winner(s)"

Weighted Factor Index Method

PROGRAM	UNMET NEED (5)		START COSTS (4)		WAGES (3)		TOTAL
Auto Mechanics	1	5	2	8	2	6	19
Data Processing	2	10	1	4	3	9	23
Robotics	1	5	3	12	2	6	24

1. Identify criteria
2. Assign weight to each
3. Identify alternative programs considered
4. Calculate weight for each criterion per program
5. Total weight for each program
6. Identify priority based on weight

PLANNING/EVALUATION/BUDGETING SYSTEM
PROCESS SUMMARY

ACTIVITY	NEEDS IDENTIFIED	NEEDS ANALYSIS	OUTCOMES DECISION(S)	DEVELOP IMPROVEMENT PLAN	SUBMIT PLAN FOR APPROVAL	DEVELOP IMPROVEMENT BUDGET	SUBMIT IMPROVEMENT BUDGET FOR APPROVAL
LOCAL LEVEL	IDENTIFY NEEDS OF SERVICE AREA USE LOCAL ADVISORY COMMITTEES; APDC DATA; LABOR DEMANDS DATA; ASSESSMENT PROJECT DATA; LOCAL SURVEYS; TRADE, TECHNICAL, & PROFESSIONAL ASSOCIATIONS; LEADERSHIP FORUMS; LOCAL DEVELOPERS, ETC.	COMPARE IDENTIFIED NEEDS TO ACTUAL OUTPUT. USE IDENTIFIED NEEDS DATA, ENROLLMENTS, COMPLETIONS, PLACEMENTS, STUDENT AND EMPLOYER FOLLOW-UP, JTPA, PRIVATE SCHOOLS.	DETERMINE CHANGES THAT SHOULD BE MADE IN TERMS OF (A) NEW PROGRAMS, (B) PROGRAMS NEEDING MODIFICATION, AND (C) PROGRAMS TO BE DISCONTINUED. USE NEEDS ANALYSIS AS MAJOR RESOURCE; LOCAL AND STATE EVALUATIONS, SACS EVALUATIONS, MIS DATA, LICENSURE RATES; STUDENT INTEREST.	DEVELOP IMPROVEMENT PLAN WHICH ADDRESSES CHANGES, PRIORITIES, FACILITIES, PERSONNEL, COSTS (WHERE APPROPRIATE). USE OUTCOME DECISION DATA, LOCAL AND STATE EVALUATION RESULTS. (BECOMES SECTION OF LOCAL PLAN).	OBTAIN STATE APPROVAL OF IMPROVEMENT PLAN. PLAN TO BE SUBMITTED TO DOE. DEVELOP AND PRIORITIZE OBJECTIVES. INCLUDE 2-YEARS IN PLAN; STATE WILL CONSIDER FIRST YEAR FOR BUDGET PURPOSES. COORDINATE WITH SBPVE.	DEVELOP IMPROVEMENT BUDGET BASED ON APPROVED PLAN. NOTE: IMPROVEMENT BUDGET REQUIRED ONLY IF APPROVED PLAN INCLUDES NEED FOR NEW STATE FUNDS.	SUBMIT IMPROVEMENT BUDGET REQUEST TO DOE. SUBMIT BUDGET FOR APPROVAL BY DOE STAFF. DOE STAFF COORDINATES RECOMMENDATIONS WITH SBPVE STAFF FOR REVIEW AND RECOMMENDATIONS.
TIMELINE	AUGUST 15	SEPTEMBER 15	NOVEMBER 15	JANUARY 15	FEBRUARY 15	APRIL 15	MAY 15
	YEAR 1						
STATE LEVEL	IDENTIFY STATEWIDE NEEDS FOR POSTSECONDARY VOCATIONAL EDUCATION. USE ASSESSMENT PROJECT DATA; STATEWIDE LABOR SUPPLY-DEMAND; MIS DATA; AGENCY COUNCIL, ADVISORY COUNCIL RECOMMENDATIONS; STATE SURVEYS; TRADE ASSOCIATIONS, BUSINESS & INDUSTRY COUNCIL; INDUSTRY & TRADE; OTHERS.	COMPARE IDENTIFIED STATEWIDE NEEDS TO ACTUAL OUTPUT OF POSTSECONDARY VOCATIONAL PROGRAMS. USE IDENTIFIED NEEDS DATA; MIS AND OTHER DATA TO DETERMINE VOIDS OR OVERPRODUCTION.	DETERMINE PROGRAMS ON A STATEWIDE BASIS THAT SHOULD BE (A) ADDED, (B) MODIFIED, OR (C) CLOSED. DEVELOP PRIORITY BY PROGRAM AND GEOGRAPHICAL AREA. USE NEEDS ANALYSIS DATA, LOCAL OUTCOME DECISION DATA, AND STATE EVALUATION RESULTS.	DEVELOP STATEWIDE PLAN WHICH INDICATES PROGRAM CHANGES, PRIORITIES, APPROACHES; FACILITY ADDITION, MODIFICATION OF PERSONNEL, EQUIPMENT, ETC. USE INPUT FROM STATE OUTCOME DECISION AND LOCAL IMPROVEMENT PLANS (TO CONSTITUTE MAJOR SECTION OF STATE PLAN).	PLAN SUBMITTED TO SBPVE AND AS COMPONENT OF STATE PLAN FOR VOCATIONAL EDUCATION (FEDERAL REQUIREMENT) TO STATE BOARD OF EDUCATION. (BECOMES MAJOR PLAN OF ACTION FOR SBPVE).	IMPROVEMENT BUDGET REQUEST JOINTLY DEVELOPED BY DOE AND SBPVE STAFF BASED ON COMPILATION OF LOCAL APPROVED PLANS WHICH ARE BASED UPON STATEWIDE PLAN.	SUBMIT IMPROVEMENT BUDGET REQUEST THROUGH OPB AND BUDGETING PROCESS TO GENERAL ASSEMBLY.

APPENDIX E

PRELIMINARY DEFINITIONS & STANDARDS

CRITICAL CRITERIA AND DEFINITIONS

Total Enrollment By Taxonomy for Past 3 Years:

Includes total enrollment by taxonomy of full-time and part-time students attending the regular day program, taught by full-time instructional staff members.

Source: Local School Attendance reports for the sixth school day of each quarter.

Assessment Period: Spring quarter, 1982 including summer quarters through Winter quarter, 1985

Total Completion by Taxonomy for Past 3 Years:

Includes the total number of graduates plus the total number of enrollees completing more than 50% of the program by taxonomy.

Source: MIS Fall Followup Report

Assessment Period: October followup reports from 1982, 1983, 1984

Total Placement by Taxonomy for Past 3 Years:

Includes the total number of positive placements by taxonomy. This is identified to include number employed in field, number employed in related field, number continuing their education, and number entering the military.

Source: MIS data

Assessment Period: October followup reports from 1982, 1983, 1984

TOTAL ENROLLMENT BY TAXONOMY

PROGRAM TITLE & TAXONOMY #	Spr '82	Sum '82	Fall '82	Wtr '83	Spr '83	Sum '83	Fall '83	Wtr '84	Spr '84	Sum '84	Fall '84	Wtr '85
												65
85												86

TOTAL COMPLETION BY TAXONOMY

PROGRAM TITLE & TAXONOMY NUMBER	FALL 1982	FALL 1983	FALL 1984
87			55

TOTAL PLACEMENT BY TAXONOMY

PROGRAM TITLE & TAXONOMY #	FALL 1982		FALL 1983		FALL 1984	
	#	% POS.	#	% POS.	#	% POS.
89					90	

SUMMARY OF CRITICAL DATA ELEMENTS

PROGRAM TITLE & TAXONOMY #	TREND IN TOTAL ENROLLMENT	AVERAGE COMPLETION % TO ENROLLMENT, 3 YRS.	AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YRS.

SUGGESTED PROCEDURES FOR SECOND LEVEL ASSESSMENTS

1. Assessment of Facilities

This form should be completed by members of the individual program's craft advisory committee. The committee should consist of no fewer than six persons representing a cross-section of businesses and positions within the occupational area for which training is provided. Each member of the advisory committee should make an independent assessment of the program's facilities and complete an evaluation form representing his/her response to the criteria. The process should be conducted by the instructional staff together with the instructional coordinator.

Proposed Standard: At least 2/3 of the advisory committee must complete an assessment form. The composite assessments should reflect:
Category A = 13+ items checked "yes"
Category B = 11-12 items checked "yes"
Category C = less than 11 items checked "yes"

2. Assessment of Equipment

This form should be completed by members of the individual program's craft advisory committee. The committee should consist of no fewer than six persons represeting a cross-section of businesses and positions within the occupational area for which training is provided. Each member of the advisory committee should make an independent assessment of the program's equipment and complete an evaluation form representing his/her response to the criteria. The process should be conducted by the instructional staff together with the instructional coordinator.

Proposed Standard: At least 2/3 of the advisory committee must complete an assessment form. The composite assessments should reflect:
Category A = 9+ items checked "yes"
Category B = 7-8 items checked "yes"
Category C = less then 7 items checked "yes"

3. Assessment of Instructional Materials

This form should be completed by members of the individual program's craft advisory committee. The committee should consist of no fewer than six persons representing a cross-section of businsses and positions within the occupational area for which training is provided. Each member of the advisory committee should make an independent assessment of the program's equipment and complete an evaluation form representing his/her response to the criteria. The process should be conducted by the instructional staff together with the instructional coordinator.

Proposed Standard: At least 2/3 of the advisory committee must complete an assessment form. The composite assessments should reflect:

Category A = 9+ items checked "yes"
Category B = 7-8 items checked "yes"
Category C = less than 7 items checked "yes"

4. Assessment of Business Support and Participation

This form should be completed by the instructional coordinator. He/she should seek at least evidence of at least three instances wherein each criteria is reflected positively. This should be approached as a collaborative activity with the instructional staff.

Proposed Standard: Category A = Evidence of 3 instances cited for each of 15+ items
Category B = Evidence of 3 instances cited for each of 12-14 items
Category C = Evidence of 3 instances cited for each of less than 12 items

EMPLOYER EVALUATION OF STUDENTS

Data available from MIS:

Technical Knowledge Rating
Work Attitude Rating
Work Quality Rating
Overall Rating

Concerns/Needs

System needs to be modified so that evaluation instrument is only sent to those employers of students who have been identified by the school as being completers.or who have completed 50%+ of the program.

STUDENT EVALUATION OF PROGRAM

Data available from MIS:

How well did your training prepare you for your job?
Was the instructional content up-to-date?
Were instructional tools and equipment similar to those used on your job?
Was instruction well presented in the lab?
Was instruction well organized?
Would you recommend this school to others for occupational training
Hourly and monthly salary of program leavers with less than 50%, program leavers with more than 50%, and program completers.

Concerns/Needs

Data on first five items identified above should be provided by category of completion: less than 50%, more than 50%, program completer

TEACHER QUALIFICATION

Data available locally:

Annual performance appraisal reports
Student evaluations
Initial employment terms/conditions/qualifications/certification

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

CRITERION	CATEGORY A	CATEGORY B	CATEGORY C
CRITICAL CRITERIA			
TREND IN ENROLLMENT, 3 YRS.	Increase	Stable	Decline
AVERAGE COMPLETION RATE COMPARED TO ENROLLMENT, 3 YEARS	80%+	70-79%	Less than 70%
AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YEARS	90%+	70-79%	Less than 70%
SECOND ASSESSMENT			
ASSESSMENT OF FACILITIES	13+ Yes	11-12 Yes	Less than 11
ASSESSMENT OF EQUIPMENT	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF INSTRUCTIONAL MATERIALS	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF BUSINESS SUPPORT	15+ items	12-14 items	Less than 12
OVERALL EMPLOYER RATING, 3 YEARS	4.5+	4.0-4.4	Less than 4.0
MEAN STUDENT RATING, 3 YEARS	90%+	80-89%	Less than 80%

SUMMARY ASSESSMENT

PROGRAM	CRITERIA						DECISION		
	****	****	****	****	****	****	MAINTAIN	PHASE-OUT	MODIFY

PROPOSED WEIGHTED INDEX

CRITERIA IDENTIFIED	PROPOSED WEIGHT
Trends in demand	6
Unmet need within 50 mile radius of school	9
Statewide demand as evidenced in AEC Study, State Plan, other	6
Estimated startup cost (Inverse ratio)	3
Estimated operating cost (Inverse ratio)	3
Estimated cost per placement (Inverse ratio)	3

PROGRAM RATING	STATE-WIDE DEMAND (6)		TRENDS (6)		UNMET NEED (9)		STARTUP COST (3)		OPERATING COST (3)		COST PER PLAC. (3)		TOTAL WEIGHT
High	3	18	3	18	3	27	3	9	3	9	3	9	90
Medium	2	12	2	12	2	18	2	6	2	6	2	6	60
Low	1	6	1	6	1	9	1	3	1	3	1	3	30

APPENDIX F

DEFINITIONS & PROCEDURES USED IN FIELD-TEST

CRITERIA, DEFINITIONS, DATA DISPLAY

CRITERIA AND DEFINITIONS

Total Enrollment by Taxonomy for Past 3 Years -- NO CHANGE

Includes total enrollment by taxonomy of full-time and part-time students attending the regular day program, taught by full-time instructional staff members.

Source: Local School Attendance reports for the sixth school day of each quarter.

Assessment Period: Spring quarter, 1982 including summer quarters through Winter quarter, 1985.

Format: NO CHANGE IN FORMAT FOR DATA DISPLAY

**Total Completion by Taxonomy for Past 3 Years -- SEE CHANGE

Includes the total number of graduates, the total number of enrollees completing administrative requirements, the total number of enrollees completing more than 50% of the program, and the total number of enrollees completing less than 50% of the program who are available for employment by taxonomy.

Source: MIS Fall Followup Reports

Assessment Period: October followup reports from 1982, 1983, 1984

Format: NO CHANGE IN FORMAT FOR DATA DISPLAY

Total Placement by Taxonomy for Past 3 Years: -- NO CHANGE

Includes the total number of positive placements by taxonomy. This is identified to include number employed in field, number employed in related field, number continuing their education, and number entering the military.

Source: MIS data

Assessment Period: October followup reports from 1982, 1983, 1984

Format: NO CHANGE IN FORMAT FOR DATA DISPLAY

SUMMARY OF CRITICAL DATA ELEMENTS -- FORMULAE AND DATA DISPLAY

Column #1 -- Program Title & Taxonomy Number, NO CHANGE

Column #2 -- Trend in Total Enrollment

Formula:
1. Add total enrollment for Spring Quarter, 1982, Summer, 1982, Fall, 1982, Winter 83.
2. Compute average total enrollment for four quarter period.
3. Compute average total enrollment for corresponding four-quarter periods of Spring, 1983--Winter, 1984 and Spring, 1984--Winter, 1985.
4. Calculate change in average total enrollment from first average to third year average and display by number and percentage.

Column #3 -- Average Completion % To Enrollment, 3 Years

Formula:
1. Refer to form, Total Completion by Taxonomy to identify total number of completions for the years 1982, 1983, 1984. Compute the average number of completions for the three year period.
2. Refer to the form, Total Enrollment by Taxonomy. Compute the average enrollment for the four-quarter periods, Spring 1982--Winter 1983, Spring 1983--Winter 1984, and Spring 1984--Winter 1985.
3. Calculate the percentage of average completion to average enrollment for the three year period.

Column #4 -- Average Percentage of Positive Placement, 3 Years

Formula:
1. Refer to form, Total Placement by Taxonomy to identify % of positive placement for each year, 1982, 83, 84.
2. Calculate the average percentage of positive placement for the three-year period.

DATA DISPLAY: REFER TO REVISED FORMAT ENCLOSED

SUMMARY OF CRITICAL DATA ELEMENTS

PROGRAM TITLE & TAXONOMY #	TREND IN TOTAL ENROLLMENT		AVERAGE COMPLETION % TO AVERAGE ENROLLMENT 3 YEARS	AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YEARS
	# CHGE	% CHGE		

EMPLOYER EVALUATION OF STUDENTS

Refer to revised format enclosed. Complete for programs which fall into Category C on two or more of the critical criteria.

STUDENT EVALUATION

Refer to revised format enclosed. Complete for programs which fall into Category C on two or more of the critical criteria.

ASSESSMENT OF FACILITIES
ASSESSMENT OF EQUIPMENT
ASSESSMENT OF INSTRUCTIONAL MATERIALS
ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION

Forms distributed in Macon are to be reviewed and critiqued by appropriate members of your staff together with input from advisory committees were possible. If generally satisfied with format, items and suggested procedures, please use to assess those programs which fall into Category C on two or more of the critical criteria.

SUMMARY ASSESSMENT

Refer to revised format enclosed. Please complete form using suggested standards for program categorization distributed at the Macon meeting.

EMPLOYER EVALUATION OF STUDENTS

PROGRAM TITLE & TAXONOMY #	TECHNICAL KNOWLEDGE	WORK ATTITUDE	WORK QUALITY	OVERALL RATING	RELATIVE PREPARA.	MEAN RATING ALL ITEMS	CATEGORY

Directions: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of five items to determine "mean rating, all items". Identify category of program effectiveness using the following standards for the last column: CATEGORY A = 4.5+; CATEGORY B = 4.0-4.4 CATEGORY C = Less than 4.0.

STUDENT EVALUATION

PROGRAM TITLE & TAX. #	JOB PREP.	INSTRUC. CONTENT	TOOLS & EQUIP.	PRES. IN-CLA.	PRES. IN-LAB	ORG. INST.	GRAD/ TEST	INST. INT.	CLASS SIZE	MEAN RATING

DIRECTIONS: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of nine items to determine "mean rating" in last column. Enter percentage and category of program effectiveness using the following standards for the last column: CATEGORY A = 90%+, CATEGORY B = 80-89%, CATEGORY C = less than 80%.

SUMMARY ASSESSMENT, ALL ITEMS

Directions: Using the standards provided, enter the categorical rating of each program in each column. In column #4, enter the summary rating using the following standard: Score of A on all 3 = Category A; Score of B on two or more = Category B; Score of C on two or more = Category C. On secondary assessment, Columns 5-10, please complete for all Category C programs; optional completion on Category B programs.

PROGRAM TITLE & TAX. #	CRITICAL CRITERIA				SECONDARY ASSESSMENT					
	ENROL TREND #1	AV. COMP. TO AV ENR. #2	AV. % POS. ENR. #3	SUMMARY CATEGORY #4	EMP. EVAL. #5	STUD. EVAL. #6	FACILI-TIES #7	EQUIP-MENT #8	INSTRUC. MATER. #9	BUS. SUP. & PARTIC. #10

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

CRITERION	CATEGORY A	CATEGORY B	CATEGORY C
CRITICAL CRITERIA			
TREND IN ENROLLMENT, 3 YRS.	Increase	Stable (5-10% Chge)	Decline
AVERAGE COMPLETION RATE COMPARED TO ENROLLMENT, 3 YEARS	80%+	70-79%	Less than 70%
AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YEARS	90%+	70-79%	Less than 70%
SECOND ASSESSMENT			
ASSESSMENT OF FACILITIES	13+ Yes	11-12 Yes	Less than 11
ASSESSMENT OF EQUIPMENT	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF INSTRUCTIONAL MATERIALS	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF BUSINESS SUPPORT	15+ items	12-14 items	Less than 12
OVERALL EMPLOYER RATING, 3 YEARS	4.5+	4.0-4.4	Less than 4.0
MEAN STUDENT RATING, 3 YEARS	90%+	80-89%	Less than 80%

FOLLOW-UP PLANS FOR PROGRAM MODIFICATION

PROGRAM: _____

MAJOR DEFICIENCY AS NOTED FROM ASSESSMENT CRITERIA: _____

IDENTIFIED CAUSE(S) FOR DEFICIENCY _____

_____

FOLLOW-UP ACTION TO BE TAKEN:

Activity	Timelines	Person Responsible

84

BUDGET REQUIREMENTS, IF ANY, OVER-AND-ABOVE REGULAR FUNDING:

Category	Amount	Justification
Salary		
Travel		
Staff Development		
Equipment		
Supplies/Materials		
Other (Specify)		
TOTAL		

APPENDIX G

DEFINITIONS & PROCEDURES FOR LOCAL SURVEYS

CRITICAL CRITERIA: NEW AND EXPANDED PROGRAM REQUESTS

CRITERION	SOURCE
EMPLOYMENT DEMAND IN SERVICE AREA	Survey conducted by school staff; data sought will be by major occupations within field of employment and will include business estimates for new/additional workers and workers needed for replacement due to separations. Standard form to be used.
TRENDS IN EMPLOYMENT DEMAND AS EVIDENCED OVER LAST 3 YEARS.	ADPC for service area of school.
UNMET NEED IN SERVICE AREA	Difference between employment demand evidenced in #1 above and estimated supply from all postsecondary institutions in service area including junior colleges and private schools. Estimated supply data to be collected and documented by local schools. Standard form to be used.
ESTIMATED START-UP COSTS	State-wide averages of start-up cost by program taxonomy to be determined by DOE from actual cost data for those programs currently in operation throughout the state. For new programs not previously offered in Georgia, start-up costs to be determined cooperatively between DOE staff and local school staff.
ESTIMATED COST PER PLACEMENT	State-wide averages of cost per placement by program taxonomy to be determined by DOE from actual cost data for those programs currently in operation throughout the state. For new programs not previously offered in Georgia, cost per placement will be estimated using estimated start-up costs, estimated average enrollment, and estimated length of program.

CRITERION	SOURCE
JOB AVAILABILITY WITHIN 50 MILES OF SCHOOL	Survey conducted by school staff. See "Employment Demand in Service Area" for description of focus.
ESTIMATED OPERATING COSTS	State-wide averages of operating costs by program taxonomy to be determined by DOE from actual cost data from those programs currently in operation throughout the state. For new programs not previously offered in Georgia, operating costs will be estimated cooperatively between DOE staff and local school staff.
EVIDENCED LOCAL BUSINESS/ INDUSTRY SUPPORT FOR PROGRAM	Items to address this criterion will be included in survey instrument to be used for "Employment Demand in Service Area".

EMPLOYMENT DEMAND SURVEY: SUGGESTED PROCEDURES

1. Organize a steering committee to include both instructional staff from area to be surveyed as well as supervisory staff.

2. Identify specific occupations for which data are to be collected. Enter those occupational titles in the first column on page 2.

3. Identify the major businesses in the area which hire persons in those occupations. If the service area is too large to cover in its entirety, identify a stratified sample to be taken of the following:

geographical area	single establishments
large firms	chains
small firms	unionized firms
private firms	nonunionized firms
public firms	

4. From the above analysis, identify the specific company name, address, appropriate contact person by name and title, and telephone.

5. Determine method(s) to be used to conduct survey, i.e. personal interviews or mail questionnaire or combination thereof.

6. Based on decision in #5, organize steering committee accordingly with specific assignments and timelines.

7. IF MAIL QUESTIONNAIRE:

   a. Call contact person prior to mailing to alert him/her of survey and to solicit their cooperation.
   b. Develop cover letter stating rationale for survey and benefits which they can subsequently accrue.
   c. Duplicate survey instrument on yellow paper.
   d. Enclose a self-addressed, stamped envelope.
   e. Place a commemorative stamp on the outside envelope.
   f. Code survey instruments so as to identify respondents and non-respondents.
   g. Mail survey on Monday.
   h. Followup non-respondents with telephone call and second mailing after ten day period.
   i. Followup non-respondents with telephone call interview after second ten-day period.

8. IF INTERVIEW:

   a. Call contact person prior to interview to explain reason of survey and to solicit their cooperation as well as to set appointment time for interview.
   b. TRAIN INTERVIEWERS including the following:
      standard introduction to include rationale for survey and benefits which they can subsequently accrue
      total familiarity with form and data items called for
      suggested responses for typical questions

8. IF INTERVIEWS -- continued

Train the Interviewers:

- role-play interview
- courtesies in notetaking and interviewing
- proper dress
- image of school
- proper closings and expressions of appreciation

9. WHETHER INTERVIEWING OR MAIL SURVEYS, ARRANGE WITH LOCAL COMPUTER SPECIALIST ON YOUR STAFF TO WRITE PROGRAM WHEREIN ALL DATA CAN BE ENTERED AND TABULATED WITH A MINIMUM OF DIFFICULTY.

10. Upon completion of the survey, synthesize the data on the "Unmet Need Projections" form.

11. Collect the estimated supply data from the public and private postsecondary schools in your service area. BE HONEST!

12. Enter the supply data on the "Unmet Need Projections" form and calculate "unmet need" in the final column for each occupation included in the survey.

EMPLOYMENT DEMAND SURVEY

COMPANY _____ DATE _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE(s) _____

CONTACT PERSON _____ TITLE _____

For the items given below, simply check the response which best represents your opinion or specify your "other" response where appropriate. On the second page, please furnish your demand estimates for the occupations identified. Thank you for your assistance.

1. Does your company currently provide in-house training for your employees?

   ___ Yes ___ No

2. If YES, identify the type(s) of training provided. Check as many as are applicable.

   ___ OJT
   ___ Apprenticeship
   ___ Formal classes
   ___ Pay tuition for employee to attend designated classes
   ___ Contract with outside agencies/persons for designated training
   ___ Other, Specify _____

3. Major source of recruitment for the occupations identified on page 2.

   ___ Area voc-tech schools
   ___ High schools
   ___ Private schools
   ___ Junior colleges
   ___ Colleges/universities
   ___ Other companies
   ___ Other, specify _____

4. Typical level of training required by your company in hiring persons for occupations identified on page 2.

   ___ High School Diploma
   ___ Area Voc-Tech School Certificate/Degree
   ___ Junior College, Associate Degree
   ___ 4-Year College Degree
   ___ OJT
   ___ Apprenticeship
   ___ Other, specify _____.

5. If a full-time program were offered to prepare persons for the occupations identified on page 2, would you and the management staff of your company support the program in the following ways. Check those applicable.

   ___ Serve on advisory committee
   ___ Advise on curriculum materials
   ___ Serve as guest speaker
   ___ Provide training materials
   ___ Provide equipment
   ___ Provide OJT, internships for students
   ___ Provide OJT, internships for program instructors
   ___ Refer other businesses to program
   ___ Refer employees to program
   ___ Arrange company tours
   ___ Evaluate program
   ___ Publicize program in company
   ___ Sponsor scholarships
   ___ Recruit program graduates
   ___ Other, specify _____

   If you could not support this type of program, why not _____

EMPLOYMENT DEMAND SURVEY

OCCUPATIONAL TITLE	# CURRENTLY EMPLOYED	TREND OVER LAST 5 YRS		AVERAGE ANNUAL # NEW JOBS ADDED	AVERAGE ANNUAL # OF REPLACEMENTS HIRED	TOTAL ANNUAL DEMAND: NEW + REPLACEMENTS
		UP	DOWN			

UNMET NEED PROJECTIONS

OCCUPATIONAL TITLE	DEMAND ESTIMATES			SUPPLY ESTIMATES			NET UNMET NEED
	TOTAL NEW ADDITIONS	TOTAL NUMBER REPLACEMENTS	TOTAL DEMAND	COMP. OF VOC PROG.	OTHERS, INC. PRIV. SCHOOLS	TOTAL SUPPLY	
							92
125							
						126	

PROGRAM: _____

PLANNING GUIDE

SPECIFIC OBJECTIVES	RATIONALE	STRATEGIES/ACTIVITIES PLANNED TO ACHIEVE OBJECTIVE	STRATEGY TIMELINES	
			PLANNED DATE OF COMPLE.	ACTUAL COMPLE.

PERSON(S) RESPONSIBLE	FACILITIES, SUPPLIES, EQUIPMENT PERSONNEL NEEDED (SPECIFY)	BUDGET REQUIREMENTS BASED ON PREV. COL.	EVALUATION MEASURES	MANAGEMENT SIGN-OFF

APPENDIX H

COST MODELS

COST-ACCOUNTING MODELS*

One of the greatest problems of the vocational educator is the cost of programs. Those persons responsible for supplying data to legislators, fellow educators and the public are insecure and frustrated by their lack of knowledge of accurate costs of programs. (Gasior, Kocinski, Doty, 1975). This lack of knowledge of accurate costs may be partly due to the fact that there is a significant lack of cost-effective evaluation in the literature. Considerable efforts have been made to evaluate programs of instruction on the basis of academic success, community need, and student popularity; however, little emphasis has been placed on program cost. (Semple & West, 1982)

In reviewing the literature, several models were found that have helped Vocational Administrators determine their program costs. The highlights of these models follow:

A. Cost Analysis Project or "CAP" Model

The purpose of this research project was the design, development, implementation, and testing of a model to examine and evaluate curriculum programs on a cost efficiency basis.

The model recommends a coherent and integrated approach to instructional data management, analysis, and reporting in that:

1. It permits the clustering of curriculum programs into instructional cost centers that are meaningful at the institutional level.
2. It permits the preassignment of student membership hours and faculty salaries to locally instructional cost centers. Thus, it radically reduces the paperwork burden required of the reporting institutions.

*Compiled by Debra Nolan, Graduate Research Assistant

3. It encourages an evaluation of curriculum programs based upon many factors, including the efficeint use of fiscal resources.

A step-by-step guide to the CAP Evaluation Model follows:

The Preparation Phase:

a. The office of the Dean of Instructional Programs assigns each course to the curriculum program that reflects the instructional intent of that course.

b. These program codes are assigned by Computer Services to each course on the machine readable course master file.

c. The Business Office assigns salary, supplies, and other direct instructional costs to the appropriate cost center.

The Operational Phase:

During each academic term, the following activities take place:

a. The Business Office tracks direct instructional costs for each of the curriculum program cost centers.

b. The Institutional Information System:
   1. Generates machine readable course section lists;
   2. Tabulates membership hours for each course; and
   3. Generates 20% reports and section enrollment data for each course.

The Annual Budget Phase:

Beginning in early March, the budgetary process for the next fiscal year commences, the following activities takes place:

a. Financial information for the previous fiscal year is disseminated by the Business Office to each department chairperson.

b. Course enrollment data from previous terms are provided by Computer Services to the appropriate department chairperson.

c. Based upon enrollment data, projected community needs, and anticipated State and local budgetary constraints, the department chairpersons meet with the dean of curriculum programs to discuss enrollment projections and budgetary needs for the coming year.

d. Preliminary departmental budgets are formulated.

e. Contingent upon final Department of Community College allocations, semifinal departmental budget requests are approved.

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The Evaluation Phase:

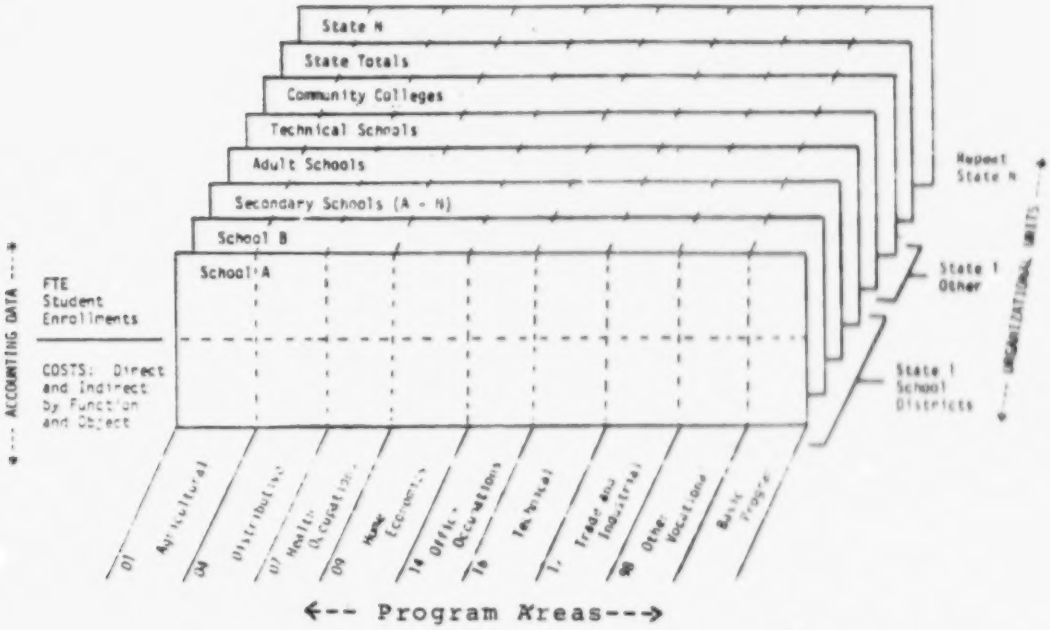
After the end of the fiscal year, June 30, the Evaluation Phase begins. First section list data are aggregated by instructional cost centers. Second, data on direct instructional costs are compiled by the Business Office. Third, instructional cost center efficiency ratios are computed in the manner outlined in the CAP Project Manual. Finally, an evaluation of each instructional program cost center is performed by the Office of the Dean of Curriculum Programs. (Semple & West, 1982)

B. The Added-Cost Model

This model is part of a three-volume series that resulted from a study by Hale, Starnes & Mickler (1977), concerning the development and testing of a model for determining the costs of vocational education programs and courses.

The figure below represents a crosswalk of the model design:

COST OF VOCATIONAL EDUCATION MODEL CROSSWALK



Source: The Development and Testing of a Model for Determining the Costs of Vocational Education Programs and Courses (Final Report). Hale, J.A.; Starnes, P.M. & Mickler, W.A. University of Florida, 1977.

The Organizational Units Dimension

This dimension identifies each operating unit that invests resources in support of vocational education programs. The purpose of this dimension of the model is to establish responsibility/cost centers; locations at which program activities occur and therefore resources are demanded. (Postsecondary Institutions, Area Voc-Tech Schools and School Districts).

The Program Dimension

This dimension consists of those course offerings in the various vocational education areas and the "basic" education program. The program areas are described in the appendices of the CAP Manual. Course definitions and coding structures are those recorded in U.S.O.E. Handbook VI.

The Accounting Data Dimension

The accounting data dimension of the model consists of student enrollments and expenditures. Definitions of student accounting are given in the appendices of the CAP Manual along with definitions of the various cost elements.

This three-volume study sought to:

(1) Develop a model for calculating the total costs on a full-time equivalent per student basis for vocational secondary and postsecondary school level courses and programs, and which will permit the analysis of these costs in terms of the basic school program costs; and

(2) to demonstrate the capabilities of the model by using the model to gather and report the vocational program cost data on a number of selected school districts for secondary level offerings and for a number of postsecondary institutions. Also, this task included the reporting of "basic" program costs for school districts and postsecondary institutions. (Hale, Starnes & Mickler, 1977)

C. Model for Cost Per Pupil

Gasior, Kocinski & Doty (1975) developed a model to determine per pupil costs at each of three defined expenditure levels (district, building, and program), were simply a summing of all expenditures at a level and dividing the sum by the number of students enrolled at the level being examined. Enrollment measures used included both average daily enrollment (ADE) and average daily attendance (ADA). Vocational education per pupil costs

at the building level and the program level were determined using the same procedure: sum of expenditures divided by student ADE or ADA. The total per pupil cost identified was simply the sum of the per pupil costs identified at each level. Total program costs were determined by multiplying the total per pupil costs times the ADE or ADA student count in the program being examined. Percentages of total cost by level were also computed. (Gasior, Kocinski & Doty, 1975)

The studies cited indicate that there is little agreement regarding underlying theory upon which to base study methodology and approach. What is obvious is that the factors selected by any institution (as elements contributing to the direct cost of programs) must satisfy its data users.

BIBLIOGRAPHY

Gasior, A.G., Kocinski, R.R. & Doty, C.R. MODEL FOR COST PER PUPIL For Vocational Education Programs and Types of Schools. Rutgers University: The State University of New Jersey, 1975. (ED 114-494)

Hale, J.A., Starnes, P.M. & Mickler, W.A. The Development and Testing of a Model for Determining the Costs of Vocational Education Programs and Courses (Final Report) Gainesville, Fl.: University of Florida, Institute for Educational Finance, 1977. (ED 155-310)

Semple R.M. & West, D.B. COST ANALYSIS OF CURRICULUM PROGRAMS: A Technical Report. Nash Technical College, Rocky Mount, North Carolina, 1982 (ED 229-612)

APPENDIX I

SUMMARY RESPONSES, TEAM MEMBER CRITIQUE

SUMMARY RESPONSES

Given below is a summary of the responses which you gave to the questions posed at our meeting on March 11. Please indicate your reaction to each of the responses by checking the appropriate space following each item and entering any comment which you feel is appropriate. Please return by March 22.

1a. In regard to the three criteria/indicators identified for the preliminary assessment of program effectiveness, my major concerns are:

	AGREE	DISAGREE	COMMENT
"The question of credibility! Placement figures are manipulated by the instructors; MIS form needs to be reinvented. Completion: what does it tell us?"	____	____	_____
"Vague definition. Lack of crisp formula for determining leading indicators."	____	____	_____
"MIS data should be used for all criteria to assess same time period."	____	____	_____
"There should be included criteria & indicators to assess the instructor's ability-effectiveness and also criteria/indicators to assess both (separately) the effectiveness of the recruitment/ public relations and the coordinator of instruction's participation and effectiveness. We have in effect that if there is a problem the instructor has it."	____	____	_____
"Continue searching for common definition of completion."	____	____	_____
"Using averages. The three major criteria are good, but better definitions will help."	____	____	_____
"Definitions (Completers, related-field, placement, etc.) Possible inaccuracy in MIS data. Need for meaningful method to massage data to find 'trends.'"	____	____	_____
"Have a definition which will allow all schools to report completers in the same manner."	____	____	_____

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1b. My recommendations are:

	AGREE	DISAGREE	COMMENT
"Would like to see definitions in terms having close correlation between this project and the SACS Evaluation projects. Would like to see further work on categorizing programs formula. Would like to see means of getting needed MIS data cleanly."	____	____	_____
"We use trend from point A (1st qtr) to point B (last qtr) either up, down or level and associate a rating to each of these three conditions."	____	____	_____
"Define more precisely graduate/completer and field/related placement. Develop formulas/computer program that can be uniformly used."	____	____	_____
"Redo method of placement reporting; rethink our position of value of 'completion'".	____	____	_____

2. In regard to the criteria identified for secondary assessment of program effectiveness, my major concerns are:

"Credibility of figures! Employer evaluation cannot be accurately measured. Student evaluation, unless a very good sample, is worthless. Facilities, equipment, etc. evaluation can be manipulated if only in house people are used."	____	____	_____
"Too many factors/standards--these need to be refined/consolidated to no more than three criteria. Need a more objective/standardized method reassessment."	____	____	_____
"Amount of information available on student evaluation and employment evaluation is inadequate for judgement. Rating scale needed on forms used to gather information."	____	____	_____
"As far as I'm concerned, the employer's and student rating is a total waste because of the low number of returns and the rating method."	____	____	_____
"Employer evaluation: need sufficient response to serve as an indicator."	____	____	_____
"Rating all six criteria equally."	____	____	_____

	AGREE	DISAGREE	COMMENT
"Difficulty of getting craft committee inputs and fact that	____	____	_____
"The limited number of employers' evaluations available."	____	____	_____

2b. My recommendations are:

"Survey a greater number of employers at least in 'C' programs."	____	____	_____
"Have an expert panal for each program category who could judge facilities and make evaluation."	____	____	_____
"Use a weighted system." (Rather than treating all 6 criteria equally)	____	____	_____
"Develop standards & criteria for space/facilities."	____	____	_____
"Develop uniform assessment process."	____	____	_____
"Rethink inclusion of student and employer evaluation. Redesign equipment, etc. survey and use outside evaluators."	____	____	_____

3. In considering the recommendation of combining the criteria into one assessment for all programs, my reaction is:

"To keep them separate. The first three are the most critical and there is no need to go to the secondary assessment if the first three indicate the program is strong. If there are weaknesses in the second six, they will be reflected in the first three."	____	____	_____
"Positive--if we rethink the items that are in the assessment."	____	____	_____
"Both primary and secondary indicators could be combined. Weights could be assigned to each indicator."	____	____	_____
"No. Need 3 critical criteria to determine there is a proglem and the secondary to determine where problem is."	____	____	_____

	AGREE	DISAGREE	COMMENT
"No. Because if we are going to follow the concept of critical criteria, we would eliminate them. If we want to develop a total evaluation process for all programs each year, I don't think that some of the criteria in the secondary assessment are adequate."	____	____	_____
"No. There is not sufficient commonality among programs."	____	____	_____
"OK on idea IF timelines for various assessments could be made feasible."	____	____	_____
"No...Do 'C' programs and any other program the director identifies as in need of further study."	____	____	_____

4. In regard to the proposed <u>standards</u> set for the assessment of ongoing programs, my primary recommendation is:

"For a program to receive all 'C's' to be rated a C program and not two as it is now written."	____	____	_____
"OK for critital criteria. Secondary criteria need to be reworked."	____	____	_____
"Standards should be expressed both in terms of current conditions and trends."	____	____	_____
"Standards seem to be adequate for assessment."	____	____	_____
"It appears that many programs are successful inspite of unaddressed needs, equipment, supplies, etc. Misleading."	____	____	_____

5. In regard to the <u>procedures</u>, my primary recommendation is:

"No change."	____	____	_____
"Procedures are fine if we proceed with credible information."	____	____	_____
"The procedures for primary assessment should be standardized by computer program which display graphically leading indicators relating to a norm or benchmark."	____	____	_____

	AGREE	DISAGREE	COMMENT
"More staff involved in study. Sub-committee from advisory committee set up to study secondary assessment. Determine another method for student and employer evaluation."	____	____	_____
"Find methodology for controlling variables. Strong programs appear weak and weak programs appear strong."	____	____	_____
"Looking at results of pilot schools before setting specific percentages in order to have realistic numbers as standards."	____	____	_____
"This needs additional work to make sure weakest programs are identified."	____	____	_____
"Devise a straight forward system/formula for determining trends."	____	____	_____

6. Of the total assessment process for ongoing programs to date, the three strongest features are:

"Three standards for primary assessment. Comprehensiveness of criteria. Followup plan."	____	____	_____
"Organized plan of action and good leadership. Mostly valid criteria items are used. Method of organizing program modification good."	____	____	_____
"Local involvement. Systematic process. Timing."	____	____	_____
"Placement, facilities, equipment assessment."	____	____	_____
"Shows that you have problems. Shows what problems. Shows what you can do about those problems."	____	____	_____
"Looking at outcomes. The attempt to look objectively. The gathering of ideas from pilot school personnel."	____	____	_____
"Provides a formal system of evaluation consistent all over the state. Provides for recommendations to improve weak programs. Provides for budget requests to modify, expand."	____	____	_____

	AGREE	DISAGREE	COMMENT
7. Of the total assessment process for ongoing programs to date, the three weakest features are:			
"Use of averages. How we determine the secondary criteria ratings (use of outsiders). Standards for summary assessment."	____	____	_____
"Credibility of figures. Inclusion of some invalid secondary assessment items. MIS form from which we draw information."	____	____	_____
"Data base is poor. Definitions are vague. Total process too complex and time consuming."	____	____	_____
"Enrollment to completion. Student and employer evaluation. Employment demand survey."	____	____	_____
"Data sources. Time frame. Instructor involvement."	____	____	_____
"Difficulty in getting certain 'clean' data. The incompatibility between the program categorizing results and some know Pgm condition resulting from one factor being able to shift results."	____	____	_____
"May not identify some weak programs without further study. Enrollment, placement, completers are not compared for same FY period. Are 'C' programs the ones that are really the weakest ?"	____	____	_____
8. My three recommendations for addressing the weaknesses are:			
"Give the director flexibility to identify needs in programs not shown as 'C'. Make sure that future studies use data in the same FY period."	____	____	_____
"Use only 'clean' local data rather than simply suing MIS data. 'Test and try' will give results that are perceived as valid. Work with MIS to obtain data based on 'our' definitions which may vary from present MIS definitions, such as for 'completers.'"	____	____	_____

	AGREE	DISAGREE	COMMENT
"Standardize data sources. Longer time frame, at least one year. Involve instructor at earlier time."	____	____	_____
"Must clean up data collection process."	____	____	_____
"Develop clear definition. Use leading indicators as key factors. Further streamline process to reduce time/criteria/ subjective factors."	____	____	_____
"Use trend lines--point A to B. Don't compare the 3 primary criteria to each other, but let each stand alone, i.e. don't compare completors to enrollment. Better methods of collecting data for the secondary criteria and assessment."	____	____	_____
"Redesign MIS form replacement. Reevaluate 'completion.' Rethink items on secondary assessment and use <u>outside</u> evaluators."	____	____	_____

BIBLIOGRAPHY

Ackoff, Russell. A Concept of Corporate Planning. Wiley Interscience. 1970.

Allred, Marcus Daniel. A Conceptual Model for Planning in North Carolina Public Community Colleges and Technical Institutes. Doctoral Dissertation. Duke University. 1977.

Ausdle, Steven Van. Comprehensive Institutional Planning in Two-Year Colleges: Volumn I, An Overview and Conceptual Framework. The National Center for Research in Vocational Education. Special Publication No. 26. 1980.

Ausdle, Steven Van. Comprehensive Institutional Planning in Two-Year Colleges: Volumn II, A Planning Process and Case Study. National Center for Research in Vocational Education. Special Publication No. 27. 1980.

Brooks, Kenneth, Carolyn G. Litchfield and Gary Q. Green. "A Survey of Planning Techniques." Comprehensive Planning. American Vocational Association. 1978.

Cobb, R. Brian and Hallie Preskill. Evaluating Vocational Education: A Review of Past Practices and Suggestions for Future Policy. Educational Evaluation and Policy Analysis. Volume 5, Number 4, Winter. 1983.

Copa, George H., Erwin K. Geigle and U.O. Imade. Factors, Priorities and Information Needs in Planning Vocational Education. Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota. 1976.

Copa, George H. Towards a Strategy for Planning Vocational Education. Minnesota Research and Development Center for Vocational Education, University of Minnesota. 1981.

Copa, George H. and Nagi Salem. Vital Statistics for Planning: Review and Public Information About Vocational Education in Minnesota. Paper presented to American Educational Research Association Annual Meeting. 1980.

Cost Effectiveness in Training. ASTD Journal Reprint Series. American Society for Training and Development, n.d.

Coster, John K. and Patricia D. Poplin. "Evaluating the Effectiveness of Comprehensive Planning." Comprehensive Planning. American Vocational Association. 1978.

Develop Applications and Proposals for Funding Vocational Education. Module LT-H-d. American Association for Vocational Instructional Materials. 1983.

Develop Local Plans for Vocational Education: Part II. Module LT-58B-6. American Association for Vocational Instructional Materials. 1977.

Develop Long-Range Program Plans. Module A-9. American Association for Vocational Instructional Materials. 1978.

Direct Program Evaluation. Module LT-58B-10. American Association for Vocational Instructional Materials. 1981.

Dunham, Daniel. "A Planning Process to Make Vocational Education More Responsive to Real Needs." American Vocational Journal. September, 1977.

Dunham, Daniel, Barbara Lett Simmons, Benjamin C. Whitten, Paul J. Harris, and Don K. Gentry. "The Human Element in Comprehensive Planning." Comprehensive Planning. American Vocational Association. 1978.

Evaluating Training Programs, ASTD Journal Reprint Series. American Society for Training and Development. n.d.

Fox, Harold W. "The Frontiers of Strategic Planning: Intuition or Formal Models?" Management Review. April, 1981.

Franchak. Stephen J. Using Evaluation Results. Research and Development Series No. 212. National Center for Research in Vocational Education. 1981.

Future Influences on Vocational Education. Special Publication No. 46. National Center for Research in Vocational Education. n.d.

Guide for Vocational Education Planning, A. Center for Vocational and Adult Education. Auburn University. June, 1981.

Hopkins, Charles O. Data Sources for Vocational Education Evaluation. The National Center for Research in Vocational Education. Information Series No. 158. 1979.

Johnson, Milo P. and Albert J. Grafsky, Jr. Accountability: Evaluation for Occupational Programs. American Technical Society. 1973.

Kastens, Merritt L. Long Range Planning for Your Business. AMACOM: American Management Association. 1976.

Kaufman, Roger. "Needs Assessment Techniques." Staff Development Workshop presentation. Savannah, Georgia. November, 1984.

Klein, Harold and William H. Newman. "How to Integrate New Environmental Force Into Strategic Planning." Management Review. July, 1980.

Lamar, Carl F., Steven J. Gyuro, Lowell A. Burkett and Kenney E. Gray. "An Overview of Comprehensive Planning." Comprehensive Planning. American Vocational Association. 1978.

Levin, Henry M. Cost-Effectiveness: A Primer. Sage Publications. 1983.

Lewis, James, Jr. Long-Range and Short-Range Planning for Educational Administrators. Allyn and Bacon. 1983.

Lorange, Peter and Richard F. Vancil. "How to Design a Strategic Planning System." Harvard Business Review. September-October, 1976.

McKinney, Floyd. Program Evaluation in Vocational Education: A Review. Information Series No. 117. National Center for Research in Vocational Education. 1977.

Moss, Jerome E. and David J. Pucel. "A Strategy for Comprehensive Program Planning." Comprehensive Planning. American Vocational Association. 1978.

Nicoll, Paul. "The Cost of Efficiency in Vocational Education in Florida." Educational Evaluation and Policy Analysis. Volumn 6, Number 2. Summer, 1984.

Parks, Darrell L. "Training Personnel to Plan Effectively." Comprehensive Planning. American Vocational Association. 1978.

Peters, Thomas J. and Robert H. Waterman, Jr. In Search of Excellence. Harper and Row, Publishers. 1981.

Philips, Jack J. Handbook of Training Evaluation and Measurement Methods. Gulf Publishing Company. 1983.

Planning Model Developed for Western Wisconsin Technical Institute, A. Western Wisconsin Technical Institute. 1978.

Postsecondary Vocational-Technical Programs for Georgia's Future: Model and Projections. Georgia Department of Education, Office of Vocational Education. 1984.

Prepare Vocational Education Budgets. Module LT-H-1. American Association for Vocational Instructional Materials. 1981.

Selin, George T. "A Strategic Management System: The Practioner's Guide." Organizational Development: Integrating People, Systems and Technology. American Society for Training and Development. 1984.

Starr, Harold, Harold Merz and Gale Zahniser. Using Labor Market Information in Vocational Planning. R&D Series No. 228. National Center for Research in Vocational Education. 1982.

Stevenson, William W., Ellen M. Bowers and J.B. Morton. "Information Systems for Planning." Comprehensive Planning. American Vocational Association. 1978.

Stewart, Marjorie S., Betty C. Powers, Patricia D. Murphy, and Richard K. Crawby. "Using Resources to Support Planning Functions." Comprehensive Planning. American Vocational Association. 1978.

Teh-wei-Hu. Studies of the Cost-Efficiency and Cost-Effectiveness of Vocational Education. Information Series No. 202. National Center for Research in Vocational Education. 1980.

Vocational Planning Guide. National Center for Research in Vocational Education. 1981.

Warmbrod, Catherin P. and Persavich, Jon J. Postsecondary Program Evaluation. Research and Development Series No. 222. National Center for Research in Vocational Education. 1980.

Wentling, Tim L. Evaluating Occupational Education and Training Programs. Second Edition. Allyn and Bacon. 1980.